# Service Manual
# Model S 582

VOLKER
A Hill-Rom Company

# Help

### Hyperlinks

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# Version, Imprint, Type label

**Service Manual S 582 S37**
**Version 1.0 23.05.2013**
**for Völker Bed Model S 582**
**built from February 2013**

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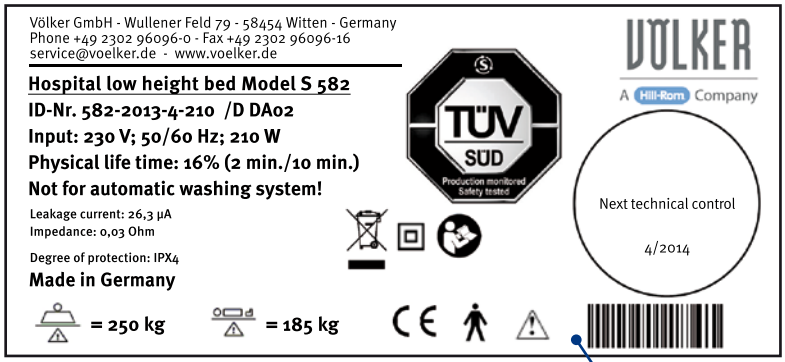
## Type label


Völker GmbH - Wullener Feld 79 - 58454 Witten - Germany
Phone +49 2302 96096-0 - Fax +49 2302 96096-16
service@voelker.de - www.voelker.de
Hospital low height bed Model S 582
ID-Nr. 582-2013-4-210 /D DA02
Input: 230 V; 50/60 Hz; 210 W
Physical life time: 16% (2 min./10 min.)
Not for automatic washing system!
Leakage current: 26,3 µA
Impedance: 0,03 Ohm
Degree of protection: IPX4
Made in Germany
= 250 kg
= 185 kg
TÜV SÜD
Production monitored
Safety tested
VÖLKER
A Hill-Rom Company
Next technical control
4/2014

The type label is located at the head end on the inside of the frame.

Raise the back section to read the type label.

For further information on the type label, see Appendix 📖 166.

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# Notes

The **Notes** section contains general notes and warning notes.

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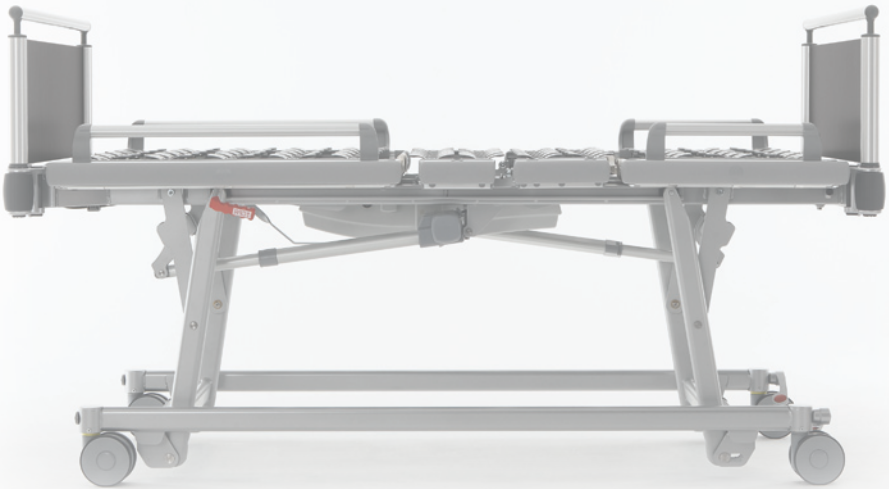

### General notes

You have purchased a bed from Völker GmbH. This bed has been built in accordance with the applicable national and international standards and regulations reflecting the current state of technology.

Völker beds satisfy requirements in terms of safety and functionality. They are tested in accordance with international standards and bear the CE mark, which documents the beds' compliance with essential requirements for medical products.

However, please read the fundamental safety provisions (see also instructions for use). Please also observe (with particular attention to any warranty claims) the further notes on the following pages.

This service manual is intended to give service technicians relevant information and ensure they work correctly.

Anyone responsible for carrying out maintenance and servicing must at least have read the safety notes for the respective bed model and be qualified in accordance with MPBetreibV § 4. The requirements for personnel defined by the Medical Device Operator Ordinance must be ensured by the bed operator.

To avoid errors and ensure that our beds work properly, these documents must always be accessible to service personnel. (Please also refer to 📖 149 in regard to staff training).

### Copyright protection

This service manual may only be transferred to third parties with the written consent of Völker GmbH. All documents are protected under copyright.

### Guarantee and liability

Völker GmbH is liable for any faults or failures, not including further claims arising in the context of the warranty obligations detailed in the main agreement. Claims for compensation, for whatever legal reason such claims may be raised, will not be entertained.

We reserve the right to make technical modifications without notice as part of the further development of the beds which form the subject of this service manual. All specifications are non binding. Printing errors excepted.

We accept no liability for damage and operational faults caused as a result of misuse and/or non-observance of this service manual.

The portrayal of the accessories does not necessarily match the actual product.

**Warning symbols**
**Information marked with this symbol must always be read and strictly observed.**

**DANGER** represents an immediate threat of danger that can cause serious physical injury or death.

**WARNING** represents potentially dangerous situations that can lead to serious physical injury or death.

**CAUTION** represents potentially dangerous situations that can cause slight physical injuries.

***NOTE*** warns of potential damage to objects or property.

**Before commencing maintenance work**

The service manual must be read in full by the person responsible for carrying out the servicing before starting the work.

Before commencing maintenance or repair work, the personnel responsible must be familiarized in detail with how to handle the bed and their attention must be drawn to the individual hazards described in this manual during assembly and disassembly of the bed's components.

The bed is not protected against explosion and must therefore only be serviced in an environment free from flammable substances and materials.

**WARNING** Before carrying out repair work, always disconnect the mains plug **and** disconnect the bed from the battery pack by pressing the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control, or press the buttons "back section down", "upper leg section down" and "ON" on the nurse keypad at the same time!

**WARNING** Maintenance and repair work should only be carried out after the bed has been disinfected.

**WARNING** Maintenance and repair work should only be carried out on an unoccupied bed. The patient may also have to be transferred to another bed before starting the work.

**WARNING** After maintenance (repair) work is complete, always check that the bed is functioning correctly. It must be checked that the bed can be used correctly without risk to the patient or care personnel.

### General regulations

The bed must only be operated and used in accordance with its designated purpose, in line with the conditions of the Medical Products Directive (MPG) and approved legislation pursuant to this, the generally-acknowledged rules of technology and the stipulations of occupational safety and accident protection guidelines. The bed may **not** be operated in a faulty state that could endanger the patient, care personnel or third parties.

### Before first activation

Before the bed is activated for the first time, care personnel must be instructed in the handling of the bed using the instructions for use. The potential dangers that can arise despite correct operation of the bed must also be indicated in full.

### Transporting the bed

⚠ **CAUTION** When moving the bed, it must always be ensured that the mains connection cable does not touch the ground and that the lying surface height is at least 35 cm.
The bed should only be moved on a solid floor. Do not attempt to push it over obstacles of over 2 cm in height. The maximum angle of inclination of the floor must not exceed 10°.

### Cleaning and disinfection

In order to maintain consistent functioning, the bed should be cleaned, disinfected and tested as soon as possible following each use, so that it can be reused immediately without risk.

Incorrect cleaning/disinfection of the bed can cause danger.

### Maintenance and repair

Anyone responsible for carrying out maintenance and servicing must at least have read the safety notes for the respective bed model and be qualified in accordance with MPBetreibV § 4. The requirements for personnel defined by the Medical Device Operator Ordinance must be ensured by the bed operator.

To ensure that the beds work properly, the instructions for use and the bed service manual must always be accessible to the service personnel.

# Notes | Warning indications 3/3

Once the maintenance work or repairs have been carried out, a corresponding control/check must be carried out on the work done. During this check, it must be determined that the bed can be used in accordance with the specifications without risk to patients, users or third parties.

The technical check 📖 151 must be carried out at least once a year and after every lengthy period of non-use.

Any discernible damage must be eliminated immediately.

⚠ **WARNING** Head and foot board are not connected to the potential equalization. Additional electrical devices should not be connected here.

**Electromagnetic and electrostatic faults**

The beds of the model S 582 satisfy the EMC requirements in accordance with the law on medical products (MPG). The basis for testing is standard EN 60601-1-2.

# Functional description

The features of the Völker care bed and its function are set out in the section **Functional description**.

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Hand control
(not shown)

Adjustable side rails
for back section, on both sides

Adjustable
back section

Adjustable side rails for lower
leg section, on both sides

Head board
(Quick release,
see fig. on right)

Additional holders
for drip stands, on
both sides, at the
foot end (not shown)

Holders for trapeze bars,
drip stands etc., on both
sides

Rapid lowering
of the back section (CPR)

Foot board
(quick release,
see fig. on right)

Height adjustment

Adjustable
lower leg section

Castors

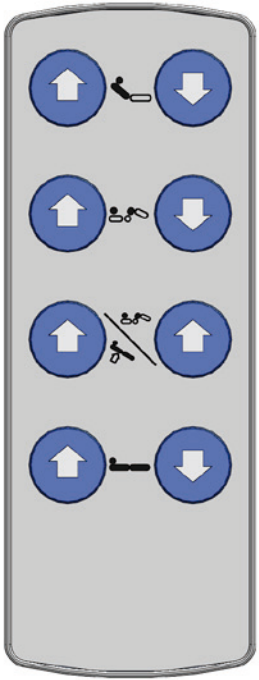
Nurse hand control /
nurse keypad
(not shown)

Seat section,
fixed

Adjustable
upper leg section

Foot end foot pedal for
castor braking (on both sides)

# Functional description | Hand control with hook



Back section up [1]

Back section down [1]

Upper leg section up

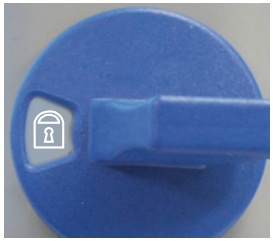
Upper leg section down

Anti-Trendelenburg position [2]

Auto-Contour [3] (optional)

Lying surface up [4]

Lying surface down [4]



Hand control locked

Hand control unlocked

[1] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position

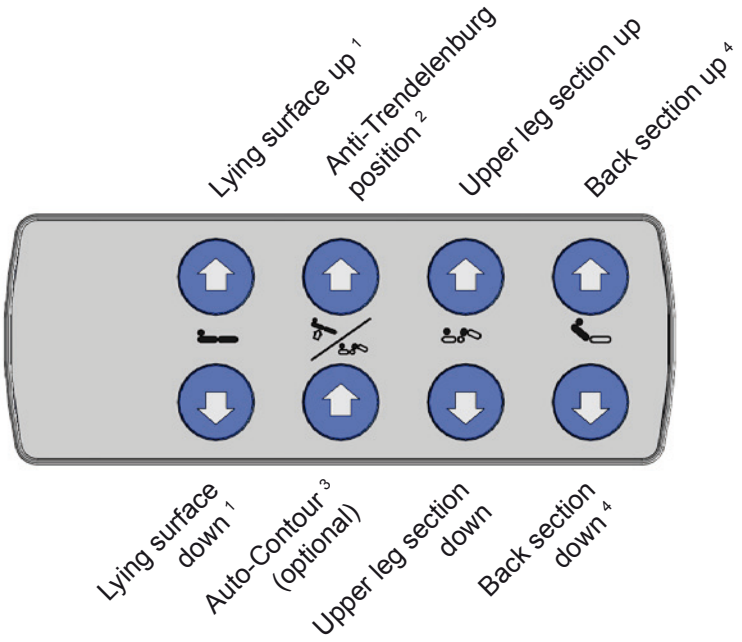
[2] Leg end lowered

[3] Back and upper leg section raised simultaneously

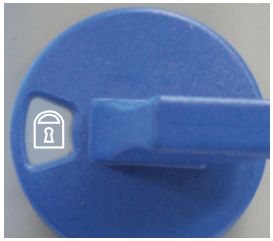
[4] Pressing the button "lying surface up" and "lying surface down" at the same time brings the bed into the horizontal position

⚠ **WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

# Functional description | Transverse hand control (optional)




Reverse side:



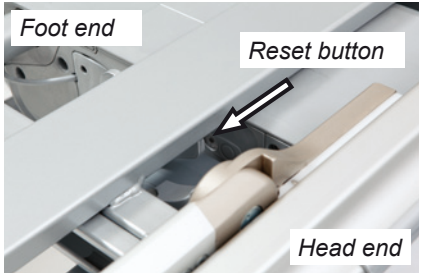
Hand control locked

Hand control unlocked

[1] Pressing the buttons "lying surface up" and "lying surface down" at the same time brings the bed into the horizontal position
[2] Leg end lowered
[3] Back and upper leg section raised simultaneously
[4] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position

⚠ **WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

***NOTE*** Please note that, to operate the bed, the nurse keypads must be switched on by pressing the "on" switch.
If no electric function can be activated, press the reset button on the motor housing.




***NOTE*** The mains voltage is connected for the duration of the active time (120 sec.) of the nurse keypad (optional) so that the LED of the mains voltage display also lights up whenever the nurse keypad is active. If the keypad switches over to its inactive state, the mains power is switched off.

⚠ **WARNING** When using a nurse hand control, it must be fixed in such a way that the patient cannot reach it from the normal lying position (Völker recommends the side rail of the lower leg section). If this is not possible, the nurse hand control must be locked when not in use and the key kept inaccessible to the patient.

⚠ **DANGER "Risk of entrapment between the lower frame or floor and the bed frame when the bed is being lowered"**
It must be ensured that no people, limbs, pets, bed linen or other objects are trapped between the bed frame and lower frame or floor during adjustment procedures.

**Double-click function**

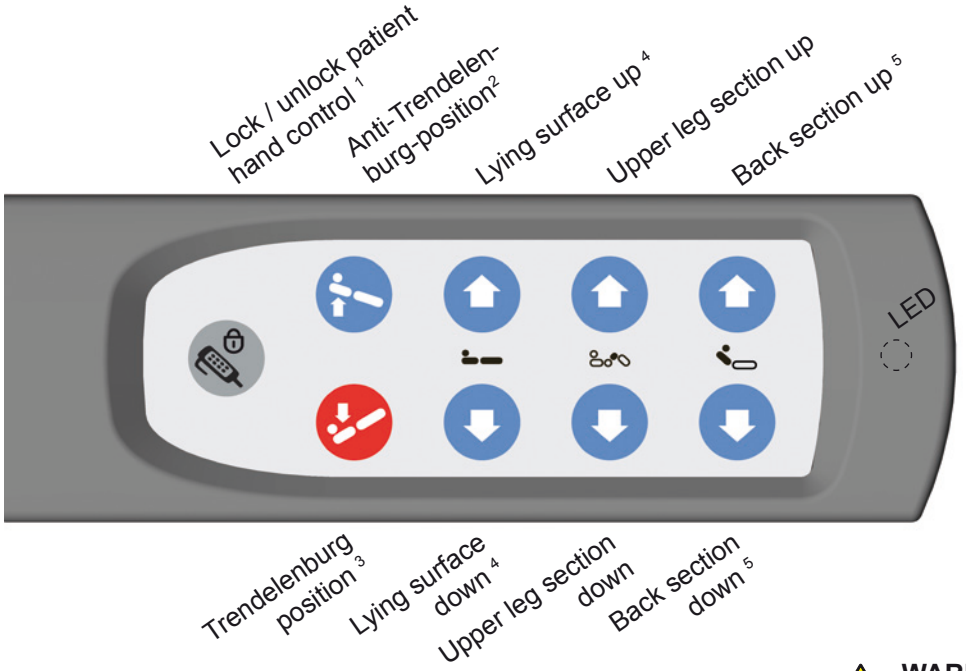
The nurse keypad can be equipped with an automatic function (double-click) on a country-specific basis.

With a double-click on the "Lying surface up" or "Lying surface down" button, for example, the lying surface moves to the highest or lowest position respectively. This function can be stopped at any time by pressing any button.

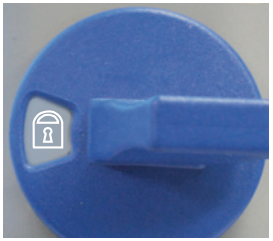
The double-click function is not possible in the standard version of the bed with nurse hand control with total lock-out (Easy-Lock).

⚠ **WARNING "Risk of entrapment"**
If the double-click function is being used, the nurse must supervise the patient until the adjustment procedure is complete.

# Functional description | Nurse hand control with total lock-out (Easy-Lock) 2/5




Reverse side:



Nurse hand control locked

Nurse hand control unlocked

[1] When the function is active (a red LED lights up on the nurse hand control), all functions on the patient hand control are locked

[2] Leg end lowered

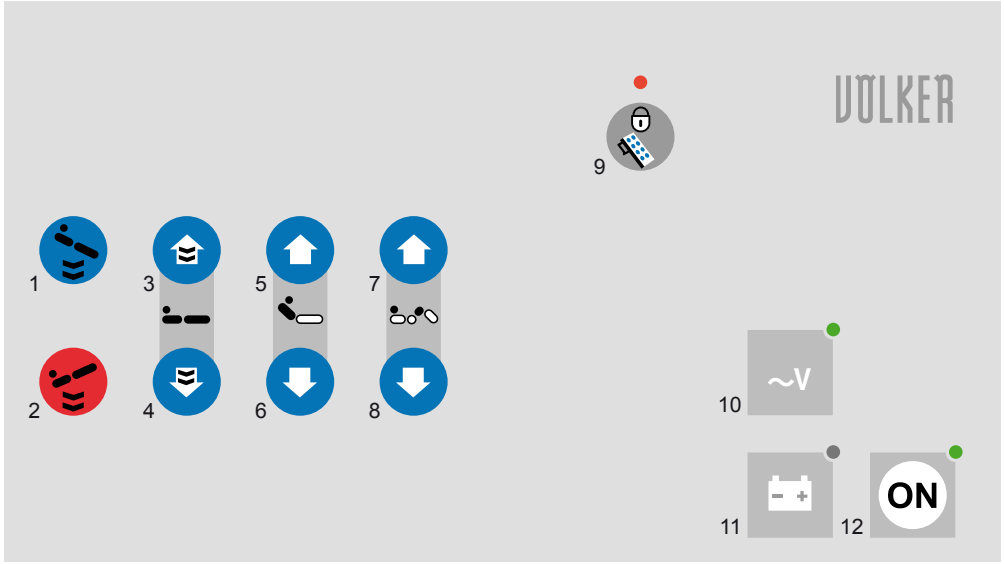
[3] Head end lowered

[4] Pressing the buttons "lying surface up" and "lying surface down" at the same time brings the bed into the horizontal position

[5] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position

⚠ **WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

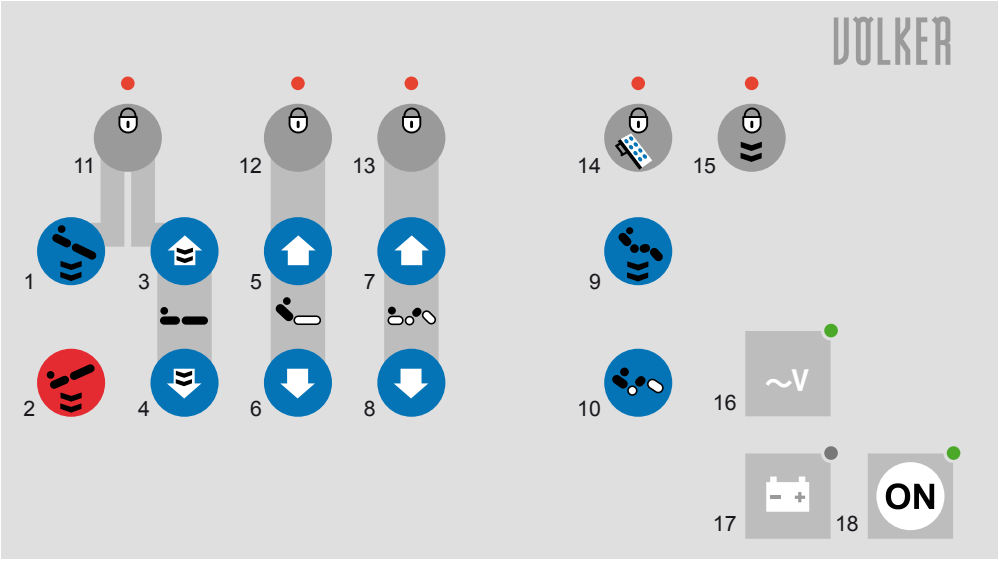
# Functional description | Nurse keypad with total lock-out (optional) 3/5




1 Anti-Trendelenburg position [A, H]
2 Trendelenburg position [B, H]
3 Lying surface up [C, H]
4 Lying surface down [C, H]
5 Back section up [D]
6 Back section down [D]
7 Upper leg section up
8 Upper leg section down
9 Lock hand control
10 Mains voltage display [E]
11 Battery display [F]
12 "on" switch [G]

[A] Leg end lowered
[B] Head end lowered
[C] Pressing the buttons 3 and 4 at the same time brings the bed into the horizontal position
[D] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position
[E] Green: mains voltage is on
[F] Green: >80% charged; yellow: 30-80% charged; red: discharged; flashing: charging
[G] After pressing the button, the keypad is available for up to 120 sec. after the last action, then it locks automatically
[H] Automatic function with double click possible on a country-specific basis

**WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

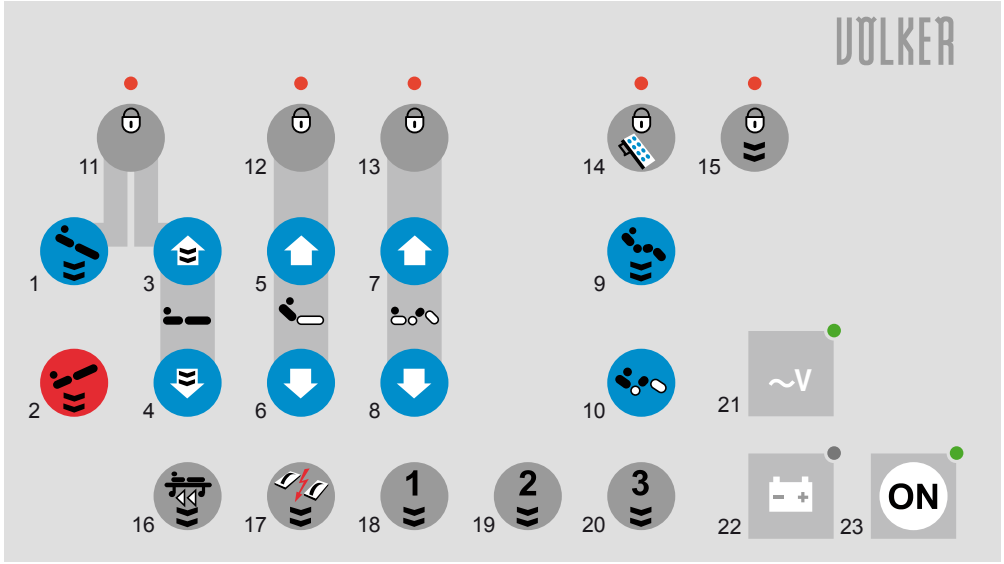



1 Anti-Trendelenburg position [A, I]
2 Trendelenburg position [B, I]
3 Lying surface up [C, I]
4 Lying surface down [C, I]
5 Back section up [D]
6 Back section down [D]
7 Upper leg section up
8 Upper leg section down
9 Cardiac chair position [I]
10 Auto-Contour [E]
11 Lock lying surface lifting mechanism and anti-Trendelenburg position
12 Lock back section
13 Lock upper leg section
14 Lock hand control
15 Lock automatic function
16 Mains voltage display [F]
17 Battery display [G]
18 "on" switch [H]

[A] Leg end lowered
[B] Head end lowered
[C] Pressing the buttons 3 and 4 at the same time brings the bed into the horizontal position
[D] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position
[E] Back and upper leg section raised simultaneously
[F] Green: mains voltage is on
[G] Green: >80% charged; yellow: 30-80% charged; red: discharged; flashing: charging
[H] After pressing the button, the keypad is available for up to 120 sec. after the last action, then it locks automatically
[I] Automatic function with double click possible on a country-specific basis

⚠ **WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

# Functional description | Nurse keypad with individual lock/automatic functions (optional) 5/5




1 Anti-Trendelenburg position [A, L]
2 Trendelenburg position [B, L]
3 Lying surface up [C, L]
4 Lying surface down [C, L]
5 Back section up [D]
6 Back section down [D]
7 Upper leg section up
8 Upper leg section down
9 Cardiac chair position [L]
10 Auto-Contour [E]
11 Lock lying surface lifting mechanism and anti-Trendelenburg position
12 Lock back section
13 Lock upper leg section
14 Lock hand control
15 Lock automatic function
16 Transport position [L]
17 Resuscitation position [L]
18 Automatic washing system position [F, L]
19 Manual washing [G, L]
20 Bed preparation [H, L]
21 Mains voltage display [I]
22 Battery display [J]
23 "on" switch [K]

[A] Leg end lowered
[B] Head end lowered
[C] Pressing the buttons 3 and 4 at the same time brings the bed into the horizontal position
[D] A variable pause time can be set via the Völker Diagnostic System (optionally available) when passing the 30° position
[E] Back and upper leg section raised simultaneously
[F] Height 40 cm, back and upper leg section max. engaged)
[G] Height 80 cm, back and upper leg section max. engaged)
[H] Height 80 cm, back and upper leg section in zero position)
[I] Green: mains voltage is on
[J] Green: >80% charged; yellow: 30-80% charged; red: discharged; flashing: charging
[K] After pressing the button, the keypad is available for up to 120 sec. after the last action, then it locks automatically
[L] Automatic function with double click possible on a country-specific basis

**WARNING** When actuating motorized adjustments with the side rails raised, it must be ensured that the patient does not have any contact with the side rails, and that no parts of his or her body or those of other people are sticking through the side rails or are trapped between the lying surface and the lower frame and/or floor!

# Functional description | Trapeze bar and accessory holders

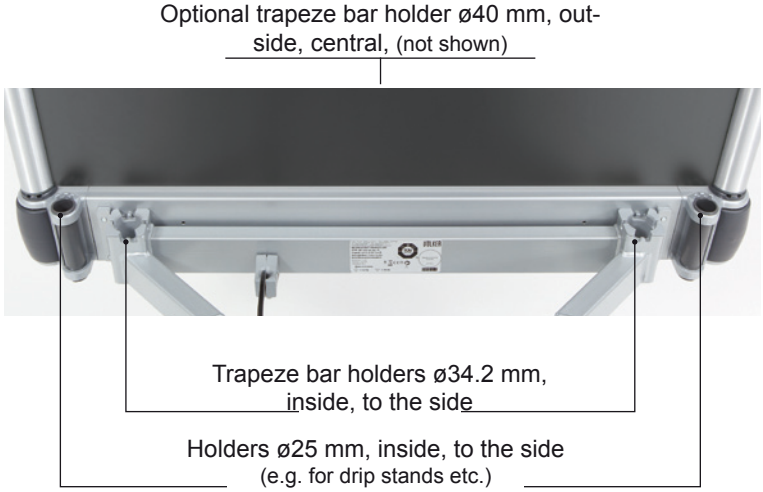
On the inside of the head panel are two holders each for the trapeze bar and drip stands / accessories. A trapeze bar holder in the center of the outside of the head panel is also a possible option. Two holders for drip stands are also positioned at the foot end next to the spacing castors.

The trapeze bar and other accessories must be slotted into the holders until they engage without rotating.

The safe working load of the trapeze bar is 75 kg.

⚠ **WARNING** Only original Völker trapeze bars should be used!

⚠ **WARNING** There is no potential equalization on the trapeze bar.


Optional trapeze bar holder ø40 mm, outside, central, (not shown)
Trapeze bar holders ø34.2 mm, inside, to the side
Holders ø25 mm, inside, to the side
(e.g. for drip stands etc.)

# Functional description | Versions and Options 1/2

The standard design of the bed can be supplied with various versions and options.

Independent of the fastening option, there are optional hand controls and nurse hand controls / nurse keypads with different function keys.

| Version/Option | Description |
|---|---|
| Hand control (versions) | With hook (standard): Transverse on the side rail with clip (optional): |

| Version/Option | Description |
|---|---|
| Nurse hand control (standard) | Nurse hand control with total lock-out (Easy-Lock) with clip on side rail: |
| Nurse keypad (optional) | Nurse keypad in bed linen storage area: |
| Bed extension (optional) | The bed can be extended by 28 cm with a telescopic bed extension. |

| Version/Option | Description |
|---|---|
| Trapeze bar (versions) | 1. Two trapeze bar holders Ø 34.2 mm at the head end, inside, to the side (standard).<br>2. One trapeze bar holder Ø 40 mm at the head end, outside, central (optional). |
| Bed linen storage area (optional) | An extendable bed linen storage area is possible at the foot end. |
| Side rails (versions) | The bed can be equipped with various side rail versions:<br>Back/lower leg section*:<br>1. Can be pulled out up to 34* cm (standard)<br>2. Can be pulled out up to 37 cm* (optional) (not possible with Design MA)<br>3. Can be pulled out up to 40 cm* (optional) (not possible with Design MA) |

| Version/Option | Description |
|---|---|
| | * Measured from the top edge of the side rail to the lying surface (without the mattress). |

This service manual covers all variants and options listed.

Precise details of the supplied bed designs can be found in the order specifications for your beds. If the original bed specification is no longer available, please contact Völker Customer Services.
Please make a note of the Völker serial number (ID No.) on the type label before you call 📖 166.

# Functional description | Accessories 1/2

To offer the greatest possible degree of flexibility, Völker offers a wide range of easy-to-attach accessories. The beds are equipped as standard with holder devices for accessories, such as drip stands and trapeze bars.

Further information about accessories can be found in our current information brochures or on the Internet at www.voelker.de 🕮. Our staff will gladly provide you with more details on the accessories that are available for your bed model.

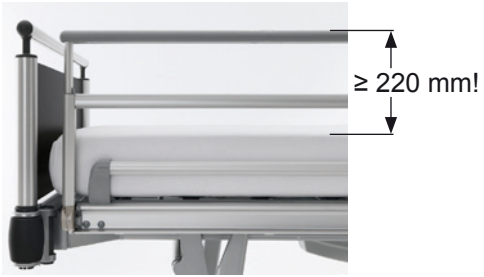
⚠ **WARNING** Only original Völker accessories should be used! The fitting of the supplementary accessories (restraints etc.) is the responsibility and due care obligation of the operator.

**Mattress**

| Mattress size | Mattress frame size | Density |
|---|---|---|
| 88 x 200/210 x 12 cm | 90 x 200/210 cm | 40-50 kg/m³ |
| 98 x 200/210 x 12 cm | 100 x 200/210 cm | 40-50 kg/m³ |

To minimize the risk of injury, only use mattresses with the dimensions and properties detailed above. If you do not use Völker mattresses, please contact a dealer in whom you have confidence.

⚠ **DANGER** The height of the raised side rails above the mattress must always be greater than or equal to 220 mm; otherwise the patient may accidentally fall out of bed. Please note that the height of the mattress has a direct influence on this.



### Use of securing systems

Securing systems such as belts should only be used exactly as specified by the manufacturer.

If securing systems in the form of abdominal belts are used, then it must be ensured that the side rails are completely raised. In this case, the gap in the middle of the rails must be closed using a rail spacer.

⚠ **DANGER** When using securing systems and rail spacers, please observe the separate instructions for use pertaining to these accessories.

If the patient is restrained using an abdominal belt with the help of restraint holders (Fig. 1), the lying surfaces must **never** be adjusted while the patient is restrained **and** must always be in the lowest position!

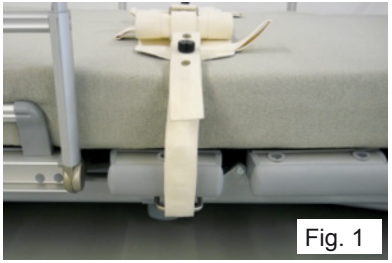


Fig. 1

The lying surface adjustment functions must be locked when a patient is secured, and the hand control must be kept out of the patient's reach!

To fix without using restraint holders (Fig. 2 and 3), fasten the restraints on the corresponding longitudinal section of the lying surface frame. Make sure that the restraint is passed between the mattress holder and the mattress.

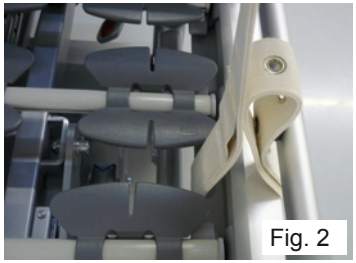


Fig. 2

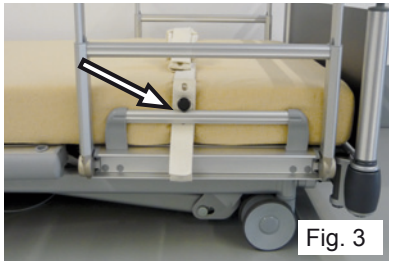


Fig. 3

# Initial start-up

The **initial start-up** section describes how the bed is first set up.

## CONTENTS


General operating instructions 🕮 27

Preparation 🕮 28

Electrical activation 🕮 29

Using the battery pack 🕮 30

Taking out of service 🕮 31

### On-time

The maximum on-time for the electromotive bed functions is specified on the bed (type label 🕮 166) or on the technical data sheet.

"2 min./10 min.“ means that each electromotive adjustment may be operated for a maximum of 2 minutes, after which a pause of 10 minutes is necessary (protection against overheating).

> ***NOTE*** Should the maximum on-time of 2 minutes be exceeded repeatedly or for longer periods, safety cut-out devices on the bed may cause the electromechanical drive to shut down. The bed must not be maneuvered using the motors until it has cooled down sufficiently!

### Battery pack

In its delivery state, the battery pack has a charge capacity that is equivalent in theory to a constant operation of minimum 10 lifting and lying surface adjustments with a working load of 250 kg.

> ***NOTE*** If the bed is parked at its location and the mains plug is not connected, this will cause the battery pack to discharge due to the buffering of the electronic components!
>
> Deep-discharged battery packs can be damaged to the extent that premature replacement is needed!
>
> To increase the stand-by time, it is recommended to disconnect the bed from the mains when it is being stored (Taking out of service 🕮 ). You can find information on reactivation in the section "electrical activation" 🕮 29. The bed should not be stored for a period longer than 6 months with a fully charged battery pack without recharging it.
>
> Appropriate and correct use of the battery pack is essential for it to have a long service life!
>
> Appropriate and correct use of the battery pack is essential for it to have a long service life!

In order to guarantee electrical functionality at all times, the bed should be connected to the mains as often as possible.

### Safety cut-out device

The bed is equipped with an electrical, self-resetting safety cut-out device that prevents the drives from overloading. In the event of very severe overloading, the bed is automatically switched off.

### Installation conditions

The bed is only approved for use in dry rooms (technical data sheet). A mains power supply and possibly a potential equalization connection are required for operation of the bed in any suitable room. When this is available and the building installation permits it, the bed should always be connected to the potential equalization.

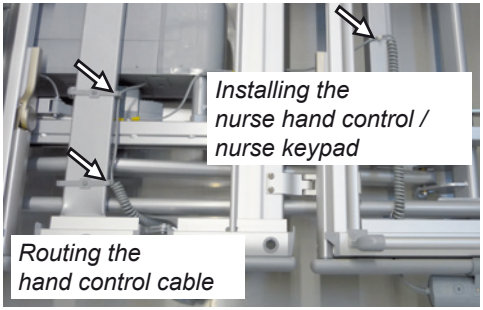
### Mechanical activation

The supplied head and foot boards must be slotted into the corner connectors on the bed frame.

### Hand control connection

The hand control should be connected to the socket provided, where appropriate. The spiral cable must be routed so that it is not under tension.

***NOTE*** To remove a hand control connector on the dual drive, you must first loosen both screws in the cover.



*Strain relief of the hand control cable in the cover*

### Bed transport

The bed can be moved without auxiliary transportation devices. For this, move the bed into the travel position (lying surface at a minimum height of 35 cm and release castor fixing).

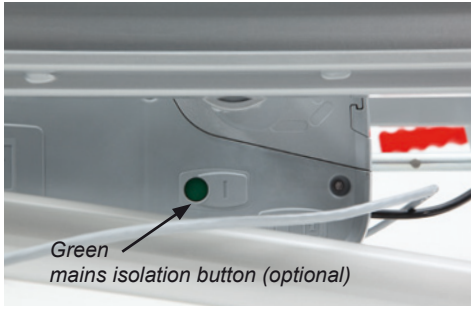
⚠ **CAUTION** The bed should only be moved on a solid floor. Do not attempt to push it over obstacles of over 2 cm in height. The maximum angle of inclination of the floor must not exceed 10°.

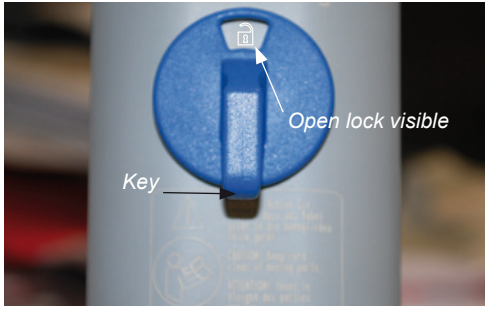
The bed can be transported by one person on even surfaces. If the bed has to be moved over sloping or rising surfaces, the bed may only be transported by at least two people holding the bed at the head and foot board for the safety of the patient and the care personnel owing to the ease with which the castors roll.

⚠ **WARNING** Check the mains cable for damage. If the cable is damaged, the bed must not be used and must be taken out of service immediately!

***NOTE*** Please be aware that incorrect handling of the mains cable can lead to the battery pack no longer charging. Incorrect handling includes actions such as pulling the cable of the mains plug to remove it from the socket, clamping the mains cable between the lying surface and lying surface frame as well as running over the cable when transporting the bed.

1. Connect mains plug to mains socket.
2. If present, press the green mains isolation button (optional) on the dual drive for one second to establish the mains connection.
3. Unlock the locking switch (open lock visible) on the reverse of the hand control in order to activate the bed's electrical functions.




***NOTE*** The mains isolation switch (optional) ensures that the bed is only supplied with mains voltage when an electrical function is actuated or the battery is charging.

# Initial start-up | Using the battery pack 1/2

The battery pack (optional) allows the bed to be operated independently of the mains supply in its delivery state for at least 10 adjustment cycles under full load.

The battery status can be monitored by connecting an optional nurse keypad with an LED for displaying the battery.

The LED of the battery display on the nurse keypad shows the charging status of the battery pack when the keypad is switched on:

| | |
|---|---|
| **Green** | The battery pack is more than 80% charged. |
| **Yellow** | The battery pack is 30-80% charged. |
| **Red** | DANGER ZONE. Battery pack is discharged. |
| **flashing** | The battery pack is being charged. |

If the LED is red or yellow, the battery pack needs to be recharged. The battery pack is switched off shortly before deep discharging. Once the bed is connected to the mains supply, press any button on the hand control to render it fully functional again. The battery pack is charged when it is connected to the mains after every use or if the charge has dropped too low.

***NOTE*** If the bed stands for a long period without being connected to the mains supply, the battery pack can discharge. The degree of discharge depends on the environmental conditions.

To increase the stand-by time, it is recommended to disconnect the bed from the mains during storage. For this purpose, press the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control, or the buttons "back section down", "upper leg section down" and "ON" on the nurse keypad at the same time.

The bed should not be stored for a period longer than 6 months with a fully charged battery pack without recharging it.

⚠ **WARNING** If electromagnetic interference occurs with other equipment in the area around the bed, please refrain from using these devices.
The bed must always be handled carefully and protected from moisture during transport.

***NOTE*** The bed is designed for use in an ambient temperature range from 10 °C to 40 °C with a relative air humidity of 30% to 75%, an air pressure of 700 to 1060 hPa and a maximum operating height of 3000 m.

⚠ **WARNING** The battery pack must only be replaced by personnel trained by Völker GmbH.

⚠ **WARNING** If the battery pack is faulty, degassing can occur. In rare cases, this can cause deformation of the battery pack housing. If this occurs, the bed must be immediately taken out of service and taken to an adequately ventilated room without sparks (from electricity or fire). Immediately inform customer services should this occur!

⚠ **WARNING** The battery pack must be disposed of in an environmentally friendly manner at the appropriate facilities. Alternatively, you can return it to Völker AG.

To activate the hand control and the nurse hand control / nurse keypad once the bed has been switched on, the function key lock must possibly be disabled.

**Taking out of service**

Should the bed be taken out of service for longer than two weeks, pull out the mains plug and press the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control or the buttons "back section down", "upper leg section down" and "ON" on the nurse keypad at the same time in order to disconnect the bed from the power supply.

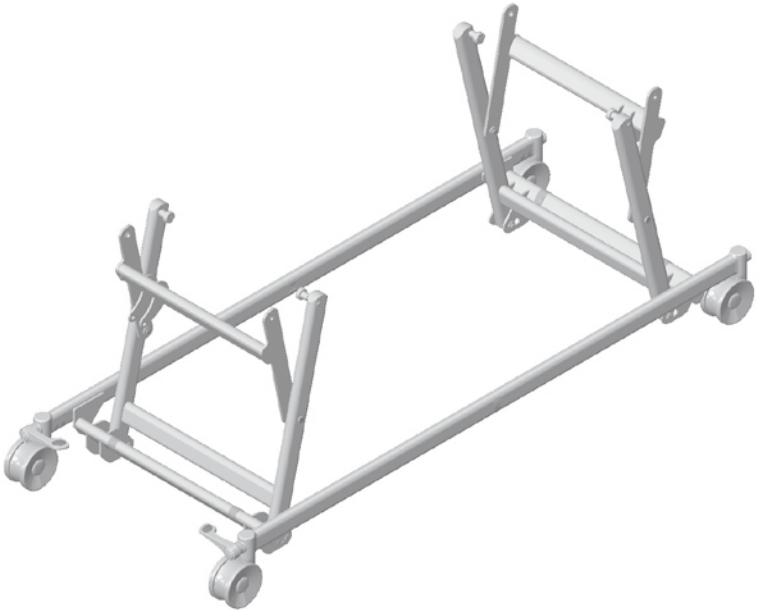
Before repair work, the mains plug must also be pulled out and the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control or the buttons "back section down", "upper leg section down" and "ON" on the nurse keypad pressed at the same time.

# Lower frame

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.

## CONTENTS

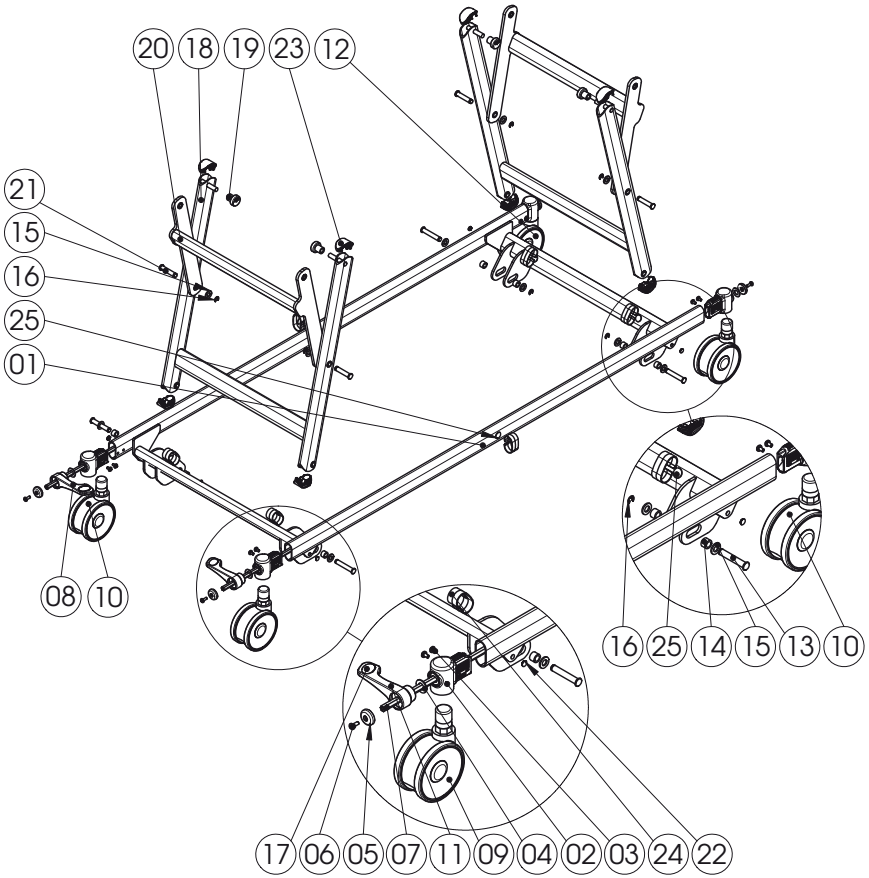
Lower frame 📖 33
Castor set single roller (optional) 📖 35



# Lower frame | Lower frame 1/2

Lower frame;
BG4493-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3801 | Lower frame | 1 |
| 02 | F3783 | Castor support | 4 |
| 03 | SR2088 | Oval-head screw M6x10 DIN 7500, self-tapping, GEOMET® coated, Form C, Torx | 8 |
| 04 | SR742 | Washer, plastic Ø28xØ14.5x1.5 | 4 |
| 05 | KT2049 | Cover, castor support | 4 |
| 06 | SR485 | Oval-head screw M6x16, GEOMET® coated | 4 |
| 07 | F3565 | Brake shaft | 2 |
| 08 | F3243 | Single foot pedal, right | 1 |
| 09 | R2070 | Dual roller, electrically conductive, totally lockable | 1 |
| 10 | R2071 | Dual roller totally lockable | 2 |
| 11 | F3244 | Single foot pedal, left | 1 |
| 12 | R2095 | Dual roller, electrically conductive, totally and directionally lockable | 1 |
| 13 | F3529 | Bolt, length compensation | 4 |
| 14 | B2016 | Sintered bushing | 8 |
| 15 | SR072 | Washer 13 DIN 125, galvanized | 12 |

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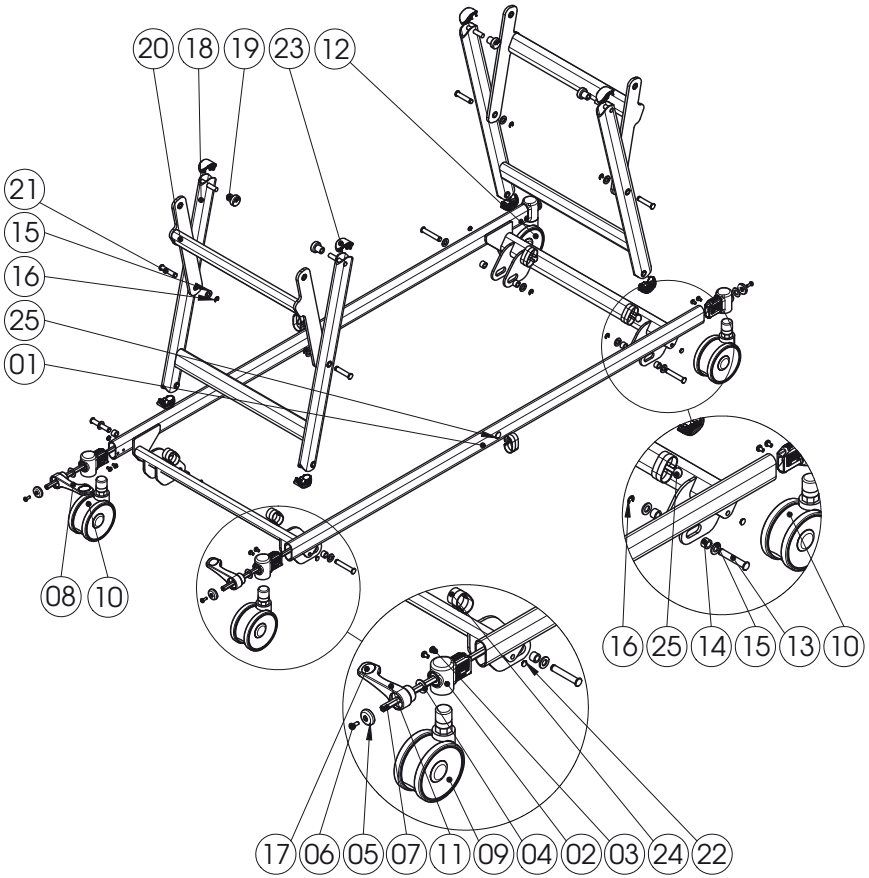
# Lower frame | Lower frame 2/2

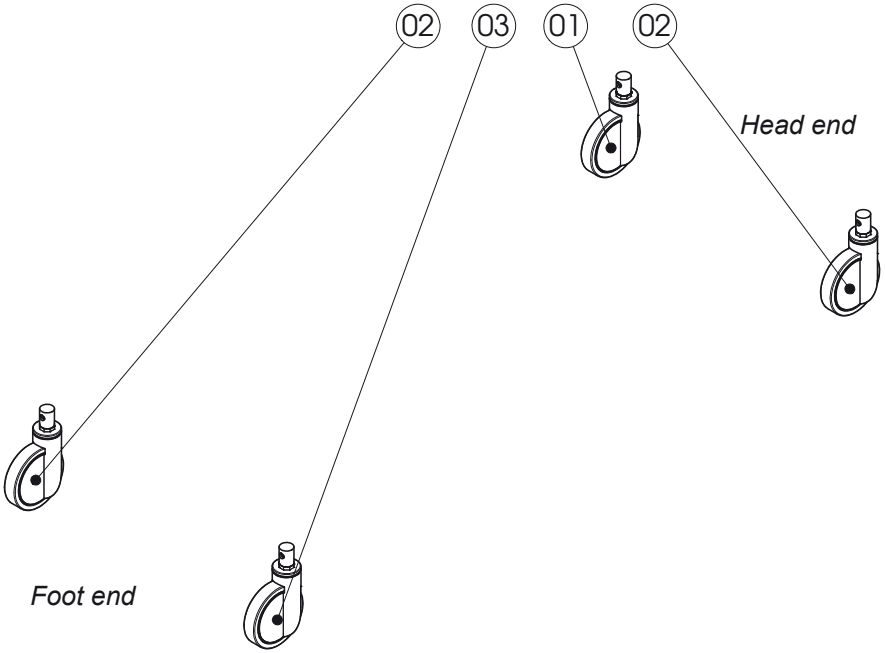
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 16 | SR2384 | Locking washer 8 DIN 6799, galvanized | 8 |
| 17 | KT2878-01 | Pedal rubber, RAL 3020 red | 2 |
| 18 | F3506-01 | Scissor lift, long | 2 |
| 19 | KT3129 | Castor, slide rail | 4 |
| 20 | F3650-02 | Lifting fork, inner | 2 |
| 21 | F3474 | Bolt, scissor lift | 4 |
| 22 | KT2718-01 | Cover cap | 4 |
| 23 | KT3074 | Cover cap, oval tube | 8 |
| 24 | KT3058-01 | Clamp, support | 6 |
| 25 | HS2444 | Foam adhesive point | 6 |



# Lower frame | Lower frame | Castor set single roller (optional)

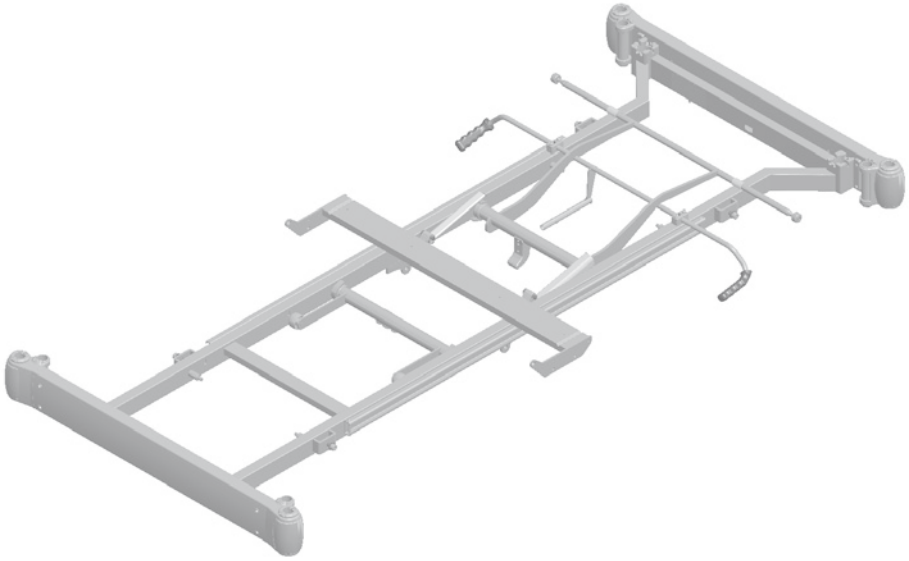
Castor set single roller (optional);
BG5264

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | R2107 | Integral single roller, electrically conductive, totally and directionally lockable | 1 |
| 02 | R2065 | Integral single roller, totally lockable | 2 |
| 03 | R2064 | Integral single roller, electrically conductive, totally lockable | 1 |



# Frame

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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- Frame with dynamic bed extension (optional) 🕮 42
- Head panel with single trapeze bar (optional) 🕮 50
- CPR 🕮 52
- Motor frame fitting set 🕮 53
  - Motor frame fitting, back section 🕮 54
  - Motor frame fitting, upper leg section 🕮 55
- Dynamic bed extension (optional) 🕮 56

# Frame | Frame

Frame for lying surface

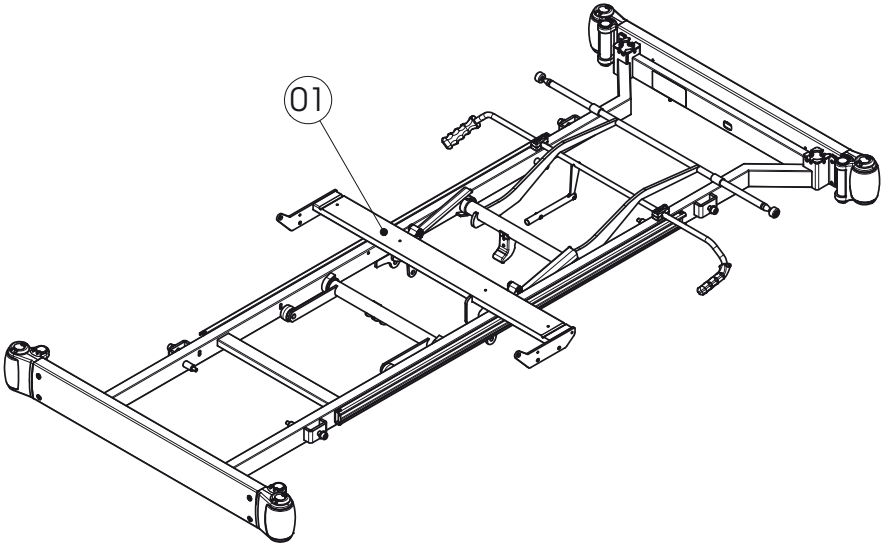
| Item | Article | Qty |
|---|---|---|
| 01 | Frame<br>*(Variants, see below)* | 1 |

Frame variants

| Width | Designation | 200 | 210 |
|---|---|---|---|
| 90 | Frame | BG4887 | BG4887 |
| 100 | Frame | BG4903 | BG4903 |

Frame variants
with dynamic bed extension (optional)

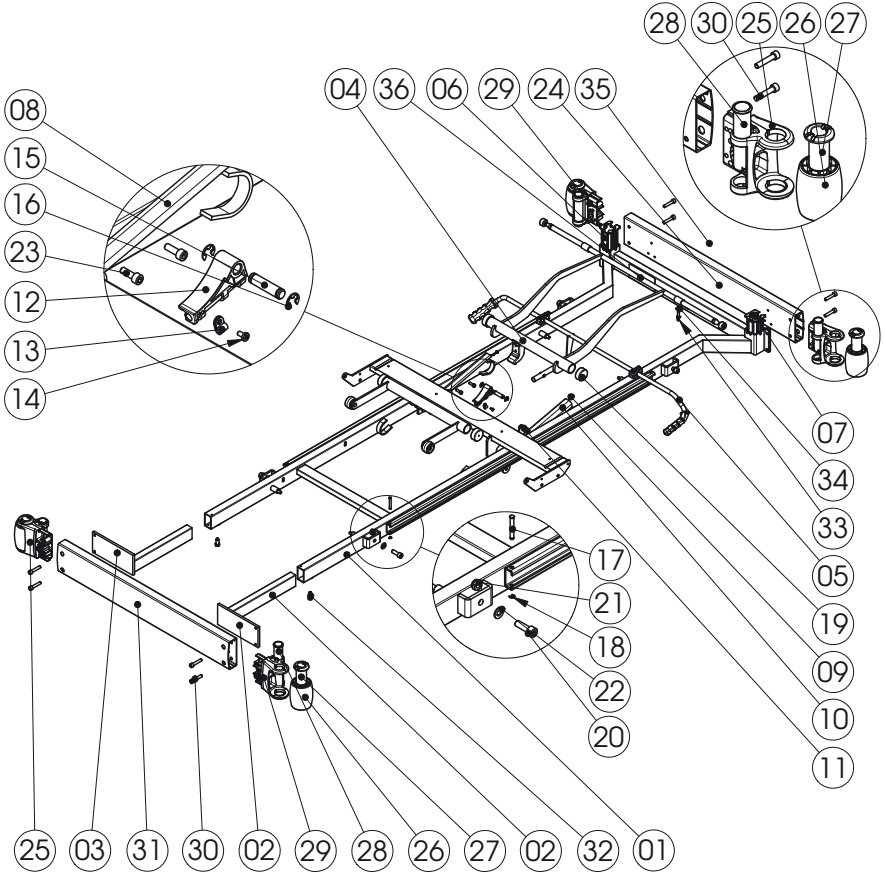
| Width | Designation | 200 | 210 |
|---|---|---|---|
| 90 | Frame | BG4905 | BG4906 |
| 100 | Frame | BG4907 | BG4908 |



# Frame | Frame | Frame 1/4

Frame for lying surface 200-210 x 90 cm;
BG4887

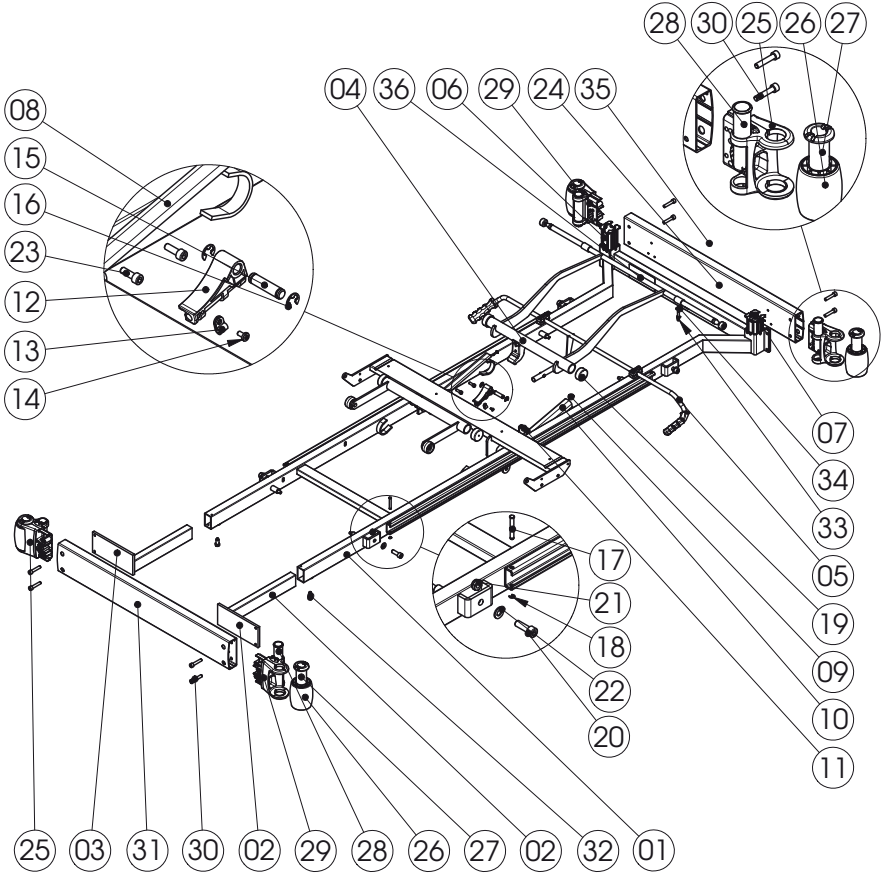
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3835 | Frame | 1 |
| 02 | F3902 | Adapter, right | 1 |
| 03 | F3903 | Adapter, left | 1 |
| 04 | BG4807 | Motor frame fitting set | 1 |
| 05 | BG4686 | CPR actuation | 1 |
| 06 | KT2289 | Dual trapeze bar socket, left | 1 |
| 07 | KT2288 | Dual trapeze bar socket, right | 1 |
| 08 | AP3337 | Slide profile, left | 1 |
| 09 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 10 | AP3336 | Slide profile, right | 1 |
| 11 | KT1005 | Slide, left | 1 |
| 12 | KT1006 | Slide, right | 1 |
| 13 | SR038 | Cable clip | 1 |
| 14 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 15 | F2847 | Bolt Ø10/8x33, galvanized | 2 |
| 16 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 17 | F3799 | Safety bolt | 4 |
| 18 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |




☞ *Continued on next page.*

# Frame | Frame | Frame 2/4

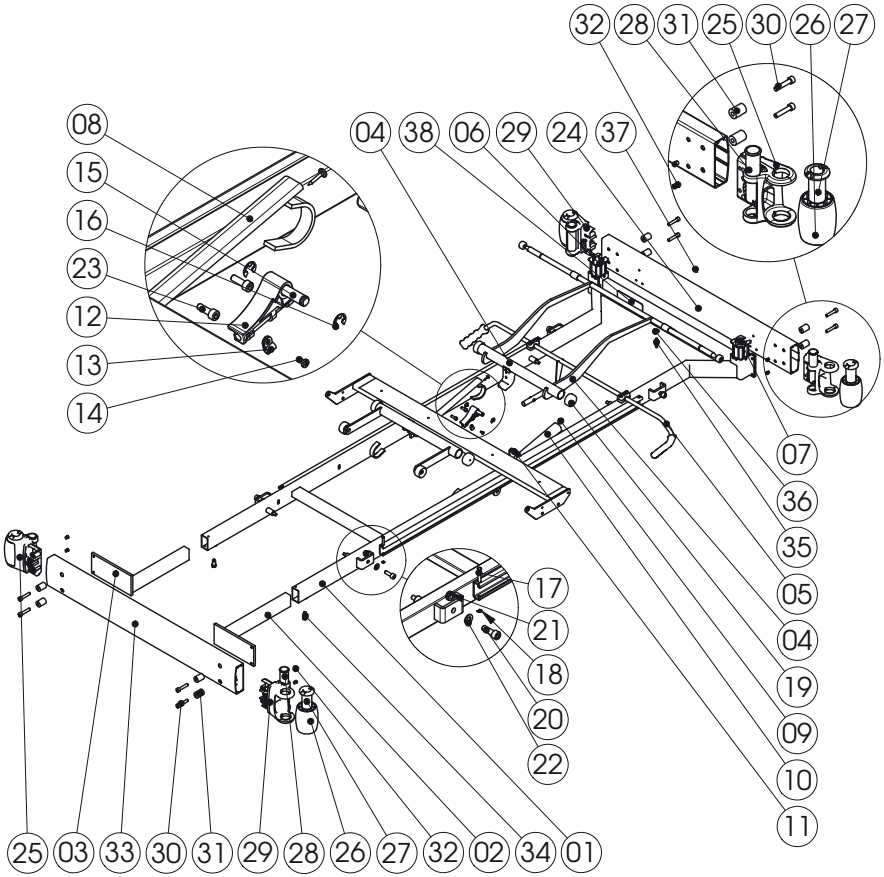
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 19 | KT3198 | Motor frame fitting, back section bearing cap | 4 |
| 20 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 21 | SR139 | Nut M10 DIN 985, galvanized | 4 |
| 22 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 23 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 24 | AP3105 | Foot panel | 1 |
| 25 | F2861-02 | Foot panel corner piece, left | 2 |
| 26 | KT2029 | Spacing roll | 4 |
| 27 | KT2031-02 | Corner piece insertion sleeve | 4 |
| 28 | KT2030 | Drip holder insertion sleeve | 4 |
| 29 | F2860-02 | Foot panel corner piece, right | 2 |
| 30 | SR2607 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 8 |
| 31 | AP3383 | Foot panel, bed linen storage area | 1 |
| 32 | SR2598 | Hexagon screw with spigot M10x20 DIN 561 | 2 |
| 33 | E421 | POAG plug | 1 |
| 34 | E422 | Color marking disk | 1 |
| 35 | T2016 | Adhesive label, potential connection | 1 |
| 36 | T001-01 | Type label | 1 |



# Frame | Frame | Frame 3/4

Frame for lying surface 200-210 x 100 cm;
BG4903

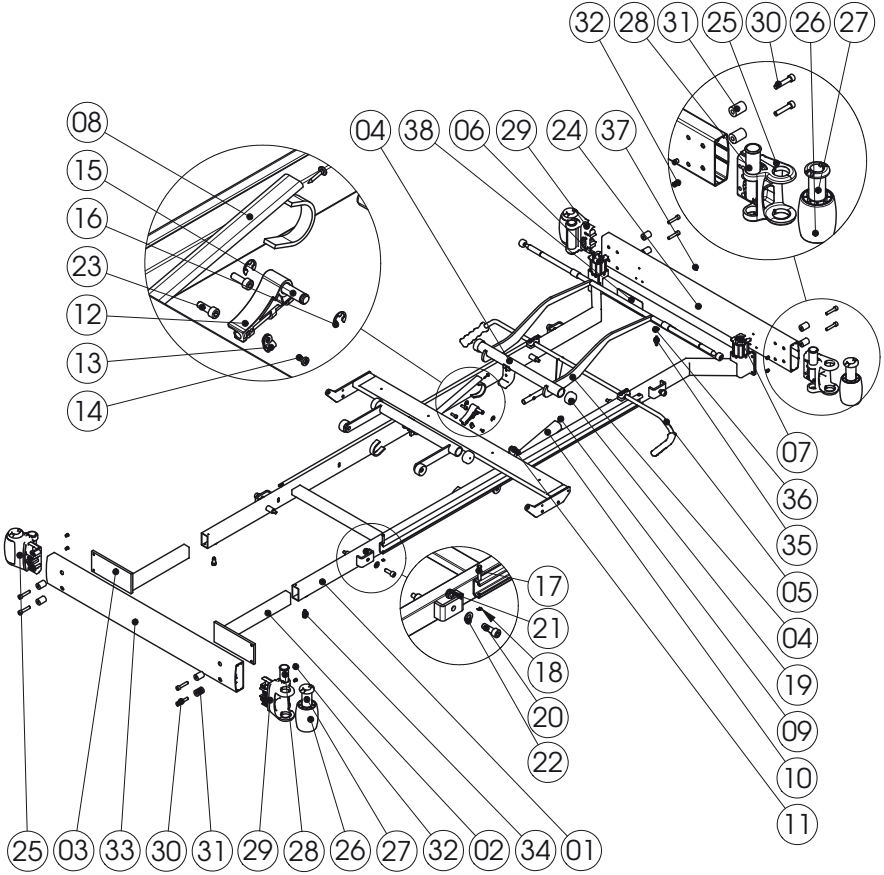
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3837 | Frame | 1 |
| 02 | F3902 | Adapter, right | 1 |
| 03 | F3903 | Adapter, left | 1 |
| 04 | BG4935 | Motor frame fitting set | 1 |
| 05 | BG4686 | CPR actuation | 1 |
| 06 | KT2289 | Dual trapeze bar socket, left | 1 |
| 07 | KT2288 | Dual trapeze bar socket, right | 1 |
| 08 | AP3337 | Slide profile, left | 1 |
| 09 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 10 | AP3336 | Slide profile, right | 1 |
| 11 | KT1005 | Slide, left | 1 |
| 12 | KT1006 | Slide, right | 1 |
| 13 | SR038 | Cable clip | 1 |
| 14 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 15 | F2847 | Bolt Ø10/8x33, galvanized | 2 |
| 16 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 17 | F3799 | Safety bolt | 4 |
| 18 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |
| 19 | KT3198 | Bearing cap, motor frame fitting | 4 |




☞ *Continued on next page.*

# Frame | Frame | Frame 4/4

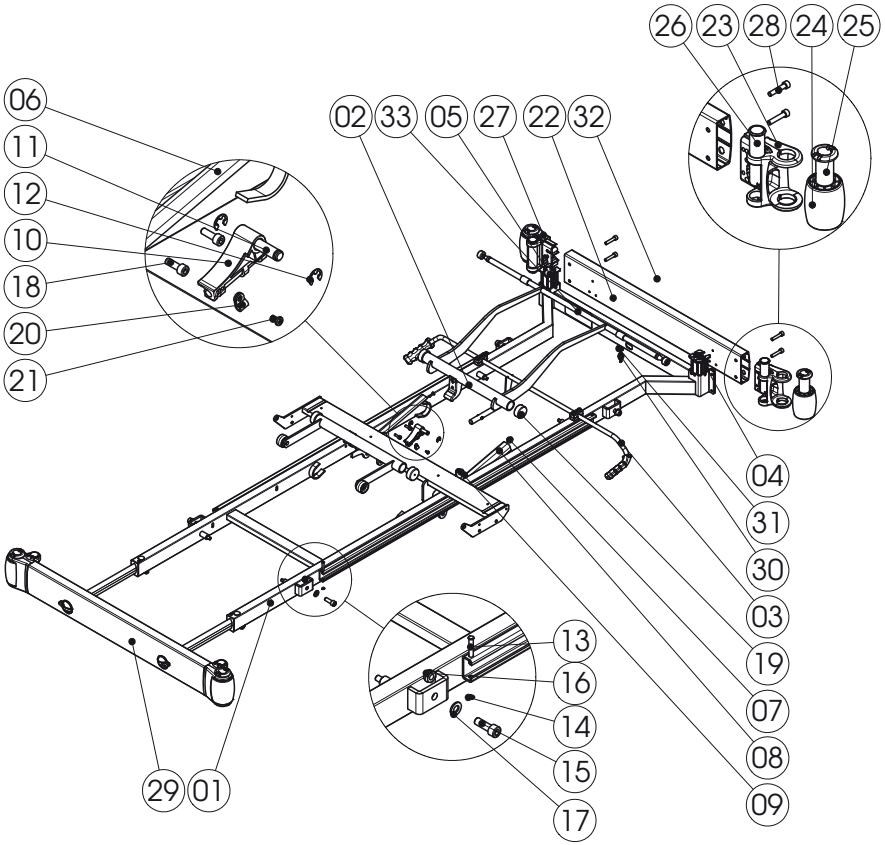
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 20 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 21 | SR139 | Nut M10 DIN 985, galvanized | 4 |
| 22 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 23 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 24 | AP3102-01 | Foot panel | 1 |
| 25 | F2861-02 | Foot panel corner piece, left | 2 |
| 26 | KT2029 | Spacing roll | 4 |
| 27 | KT2031-02 | Corner piece insertion sleeve | 4 |
| 28 | KT2030 | Drip holder insertion sleeve | 4 |
| 29 | F2860-02 | Foot panel corner piece, right | 2 |
| 30 | SR2607 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 8 |
| 31 | AP919-01 | Spacer 20x8.2x28 | 8 |
| 32 | SR372 | Screw M8x16 Taptite® II | 8 |
| 33 | AP3384 | Foot panel, bed linen storage area | 1 |
| 34 | SR2598 | Hexagon screw with spigot M10x20 DIN 561 | 2 |
| 35 | E421 | POAG plug | 1 |
| 36 | E422 | Color marking disk | 1 |
| 37 | T2016 | Adhesive label, potential connection | 1 |
| 38 | T001-01 | Type label | 1 |



# Frame | Frame | Frame with dynamic bed extension (optional) 1/8

Frame for lying surface 200 x 90 cm
with dynamic bed extension (optional);
BG4905

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3835 | Frame | 1 |
| 02 | BG4807 | Motor frame fitting set | 1 |
| 03 | BG4686 | CPR actuation | 1 |
| 04 | KT2288 | Dual trapeze bar socket, right | 1 |
| 05 | KT2289 | Dual trapeze bar socket, left | 1 |
| 06 | AP3337 | Slide profile, left | 1 |
| 07 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 08 | AP3336 | Slide profile, right | 1 |
| 09 | KT1005 | Slide, left | 1 |
| 10 | KT1006 | Slide, right | 1 |
| 11 | F2847 | Bolt Ø10/8x43 | 2 |
| 12 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 13 | F3799 | Safety bolt | 4 |
| 14 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |
| 15 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 16 | SR139 | Nut M10 DIN 985, galvanized | 4 |

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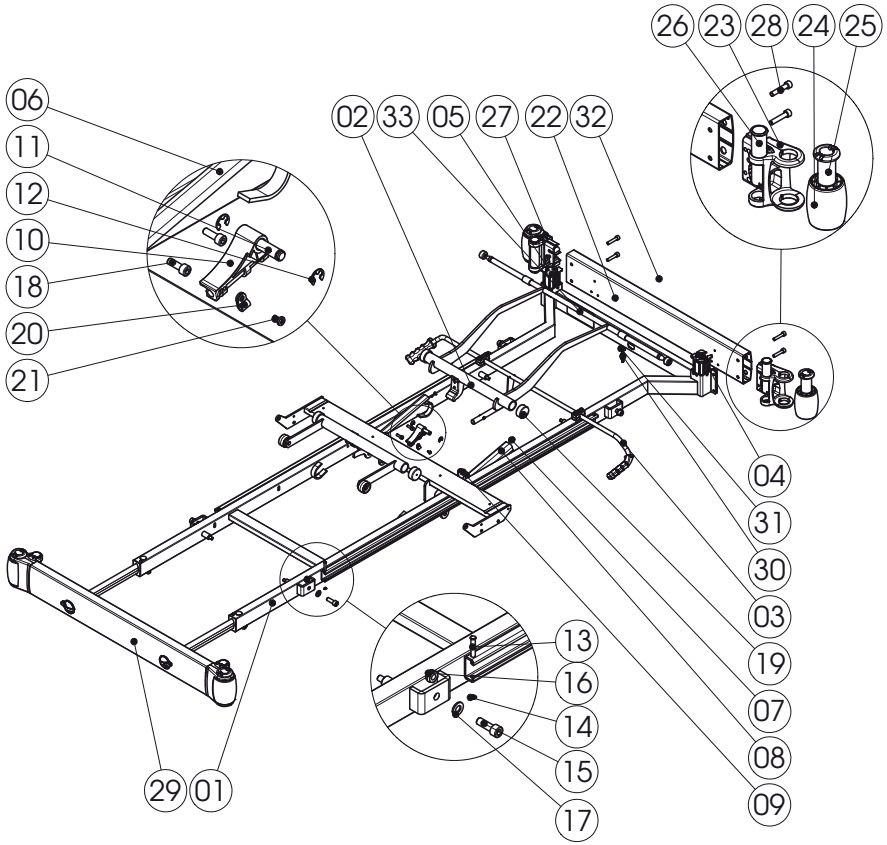
# Frame | Frame | Frame with dynamic bed extension (optional) 2/8

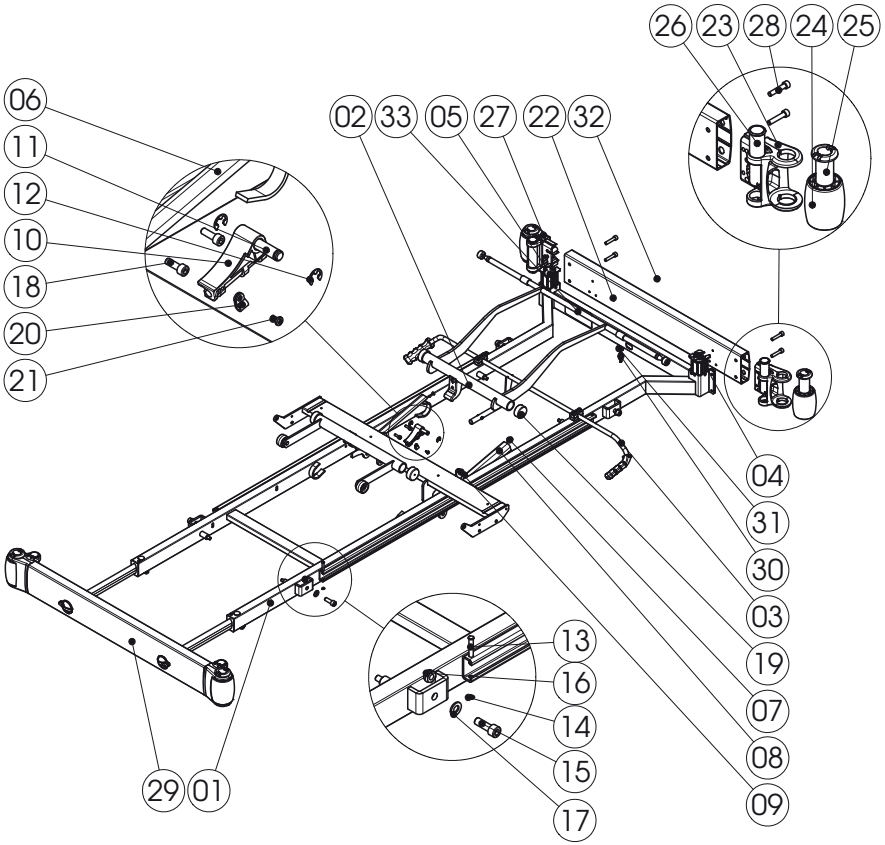
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 18 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 19 | KT3198 | Motor frame fitting, back section bearing cap | 4 |
| 20 | SR038 | Cable clip | 1 |
| 21 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 22 | AP3105 | Foot panel | 1 |
| 23 | F2861-02 | Foot panel corner piece, left | 1 |
| 24 | KT2029 | Spacing roll | 2 |
| 25 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 26 | KT2030 | Drip holder insertion sleeve | 2 |
| 27 | F2860-02 | Foot panel corner piece, right | 1 |
| 28 | SR2607 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 4 |
| 29 | BG4770-01 | Dynamic bed extension | 1 |
| 30 | E421 | POAG plug | 1 |
| 31 | E422 | Color marking disk | 1 |
| 32 | T2016 | Adhesive label, potential connection | 1 |
| 33 | T001-01 | Type label | 1 |



# Frame | Frame | Frame with dynamic bed extension (optional) 3/8

Frame for lying surface 210 x 90 cm
with dynamic bed extension (optional);
BG4906

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3836 | Frame | 1 |
| 02 | BG4807 | Motor frame fitting set | 1 |
| 03 | BG4686 | CPR actuation | 1 |
| 04 | KT2288 | Dual trapeze bar socket, right | 1 |
| 05 | KT2289 | Dual trapeze bar socket, left | 1 |
| 06 | AP3337 | Slide profile, left | 1 |
| 07 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 08 | AP3336 | Slide profile, right | 1 |
| 09 | KT1005 | Slide, left | 1 |
| 10 | KT1006 | Slide, right | 1 |
| 11 | F2847 | Bolt Ø10/8x33, galvanized | 2 |
| 12 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 13 | F3799 | Safety bolt | 4 |
| 14 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |
| 15 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 16 | SR139 | Nut M10 DIN 985, galvanized | 4 |

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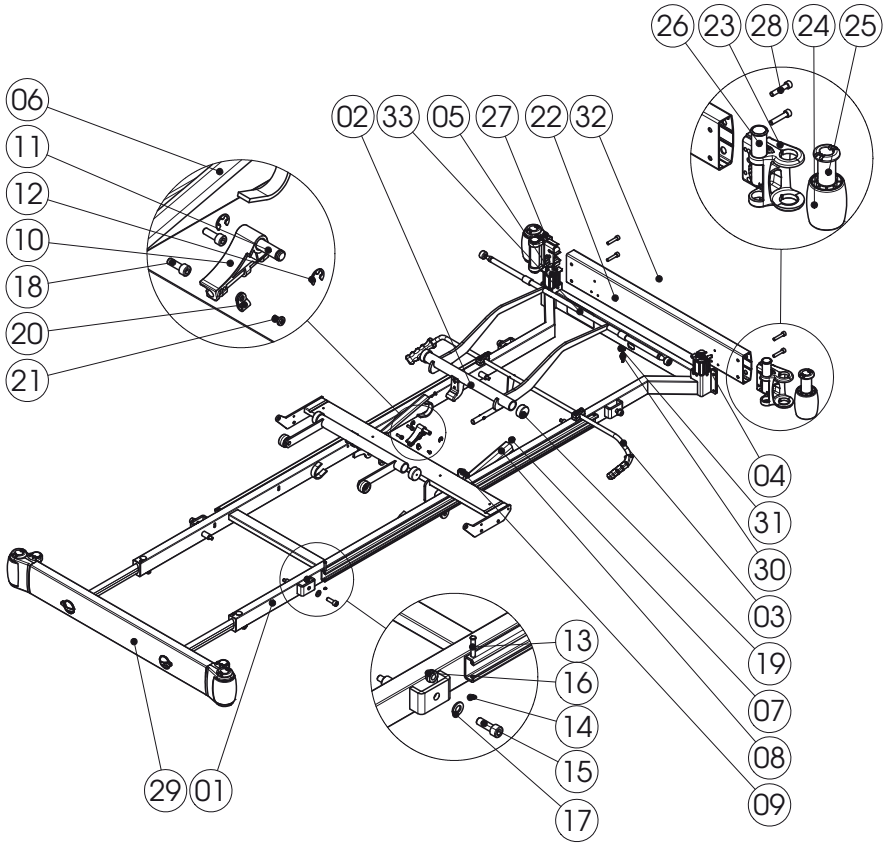
# Frame | Frame | Frame with dynamic bed extension (optional) 4/8

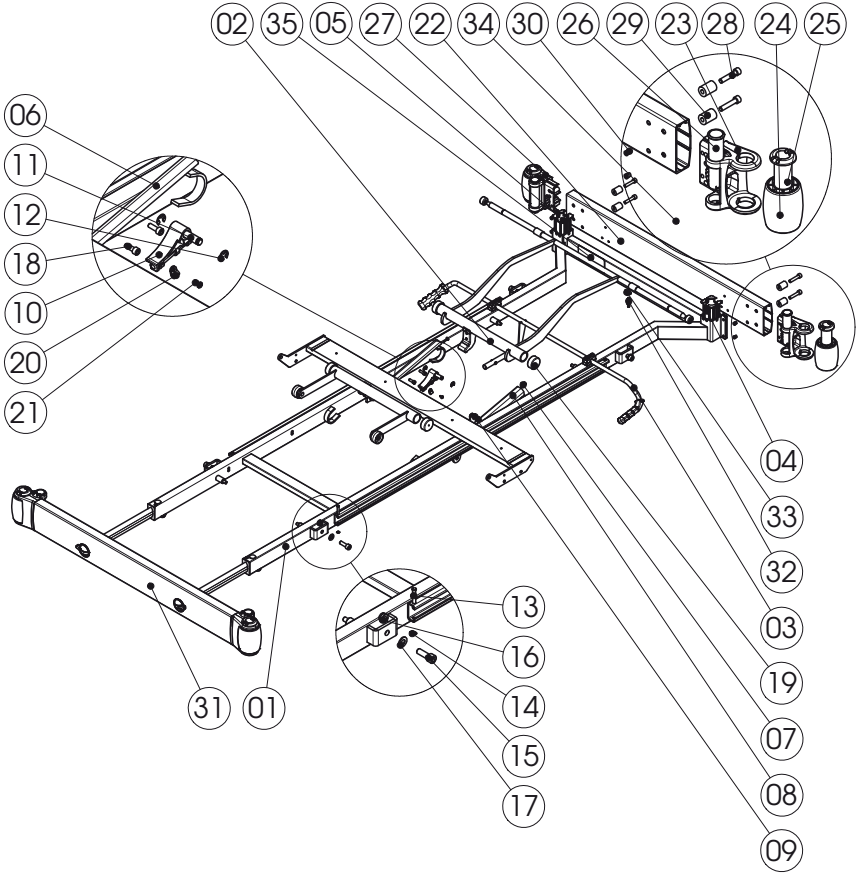
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 18 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 19 | KT3198 | Motor frame fitting, back section bearing cap | 4 |
| 20 | SR038 | Cable clip | 1 |
| 21 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 22 | AP3105 | Foot panel | 1 |
| 23 | F2861-02 | Foot panel corner piece, left | 1 |
| 24 | KT2029 | Spacing roll | 2 |
| 25 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 26 | KT2030 | Drip holder insertion sleeve | 2 |
| 27 | F2860-02 | Foot panel corner piece, right | 1 |
| 28 | SR2607-01 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 4 |
| 29 | BG4770-01 | Dynamic bed extension | 1 |
| 30 | E421 | POAG plug | 1 |
| 31 | E422 | Color marking disk | 1 |
| 32 | T2016 | Adhesive label, potential connection | 1 |
| 33 | T001-01 | Type label | 1 |



# Frame | Frame | Frame with dynamic bed extension (optional) 5/8

Frame for lying surface 200 x 100 cm
with dynamic bed extension (optional);
BG4907

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3837 | Frame | 1 |
| 02 | BG4935 | Motor frame fitting set | 1 |
| 03 | BG4686 | CPR actuation | 1 |
| 04 | KT2288 | Dual trapeze bar socket, right | 1 |
| 05 | KT2289 | Dual trapeze bar socket, left | 1 |
| 06 | AP3337 | Slide profile, left | 1 |
| 07 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 08 | AP3336 | Slide profile, right | 1 |
| 09 | KT1005 | Slide, left | 1 |
| 10 | KT1006 | Slide, right | 1 |
| 11 | F2847 | Bolt Ø10/8x33, galvanized | 2 |
| 12 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 13 | F3799 | Safety bolt | 4 |
| 14 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |
| 15 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 16 | SR139 | Nut M10 DIN 985, galvanized | 4 |

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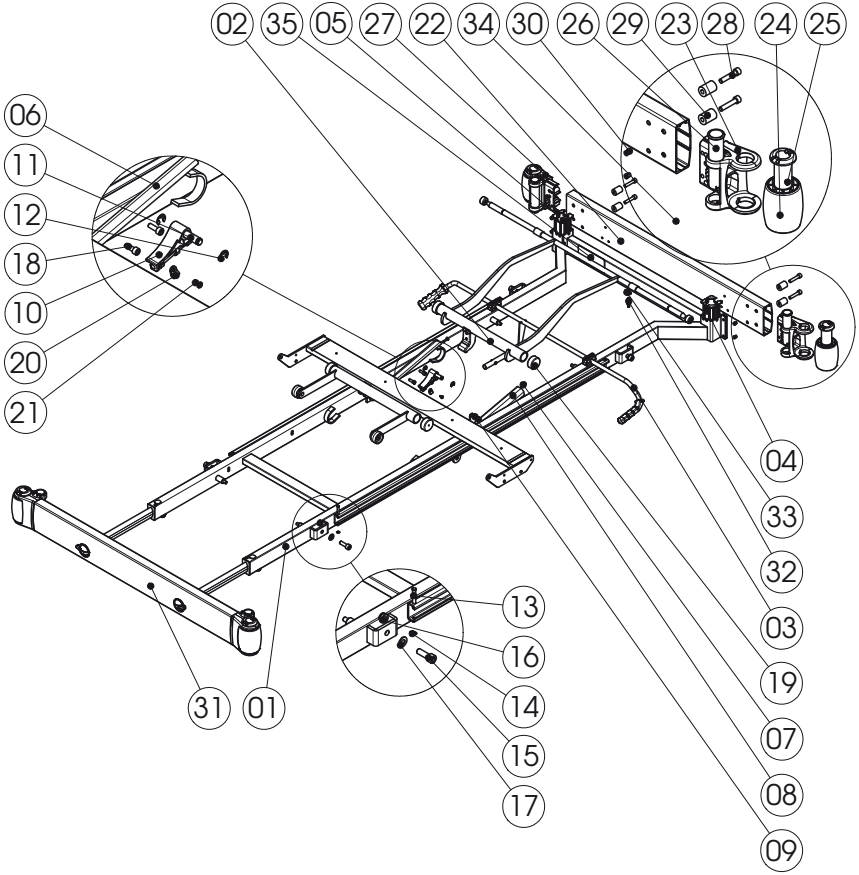
# Frame | Frame | Frame with dynamic bed extension (optional) 6/8

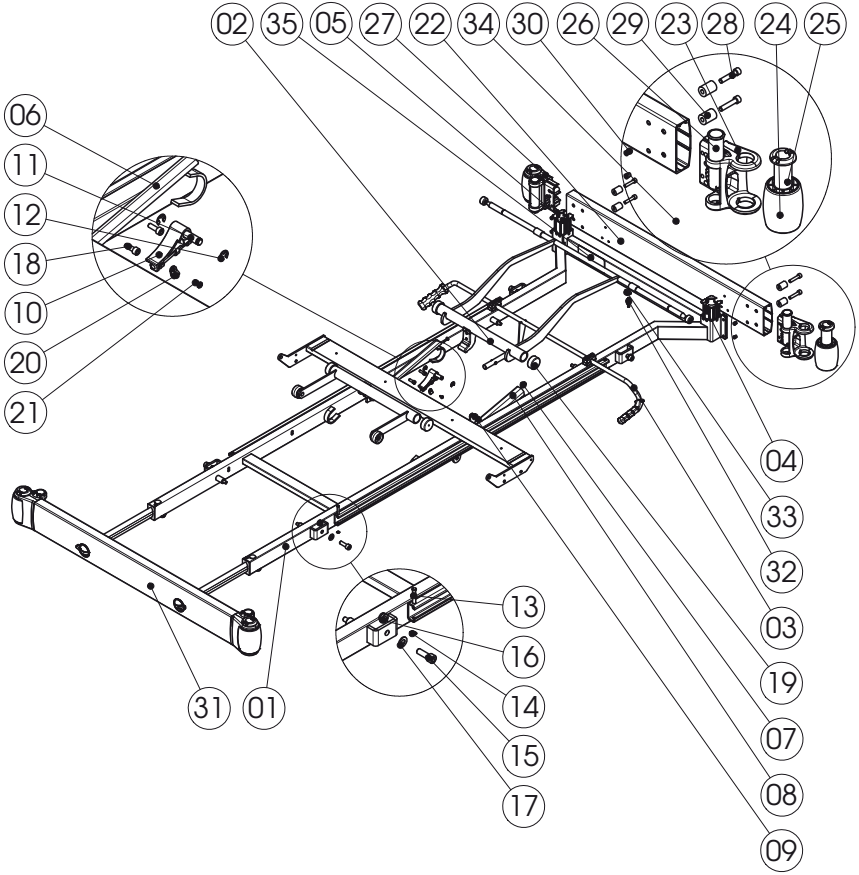
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 18 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 19 | KT3198 | Motor frame fitting, back section bearing cap | 4 |
| 20 | SR038 | Cable clip | 1 |
| 21 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 22 | AP3102-01 | Foot panel | 1 |
| 23 | F2861-02 | Foot panel corner piece, left | 1 |
| 24 | KT2029 | Spacing roll | 2 |
| 25 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 26 | KT2030 | Drip holder insertion sleeve | 2 |
| 27 | F2860-02 | Foot panel corner piece, right | 1 |
| 28 | SR2607 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 4 |
| 29 | AP919-01 | Spacer 20x8.2x28 | 4 |
| 30 | SR372 | Screw M8x16 Taptite® II | 4 |
| 31 | BG4771-01 | Dynamic bed extension | 1 |
| 32 | E421 | POAG plug | 1 |
| 33 | E422 | Color marking disk | 1 |
| 34 | T2016 | Adhesive label, potential connection | 1 |
| 35 | T001-01 | Type label | 1 |



# Frame | Frame | Frame with dynamic bed extension (optional) 7/8

Frame for lying surface 210 x 100 cm
with dynamic bed extension (optional);
BG4908

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3838 | Frame | 1 |
| 02 | BG4935 | Motor frame fitting set | 1 |
| 03 | BG4686 | CPR actuation | 1 |
| 04 | KT2288 | Dual trapeze bar socket, right | 1 |
| 05 | KT2289 | Dual trapeze bar socket, left | 1 |
| 06 | AP3337 | Slide profile, left | 1 |
| 07 | SR2062 | Flat-headed screw 5x20, Torx | 2 |
| 08 | AP3336 | Slide profile, right | 1 |
| 09 | KT1005 | Slide, left | 1 |
| 10 | KT1006 | Slide, right | 1 |
| 11 | F2847 | Bolt Ø10/8x33, galvanized | 2 |
| 12 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 13 | F3799 | Safety bolt | 4 |
| 14 | SR2441 | Locking washer 4 DIN 6799, A2 | 4 |
| 15 | SR102 | Cheese-head screw M10x30 DIN 912, hexagon socket, galvanized | 4 |
| 16 | SR139 | Nut M10 DIN 985, galvanized | 4 |

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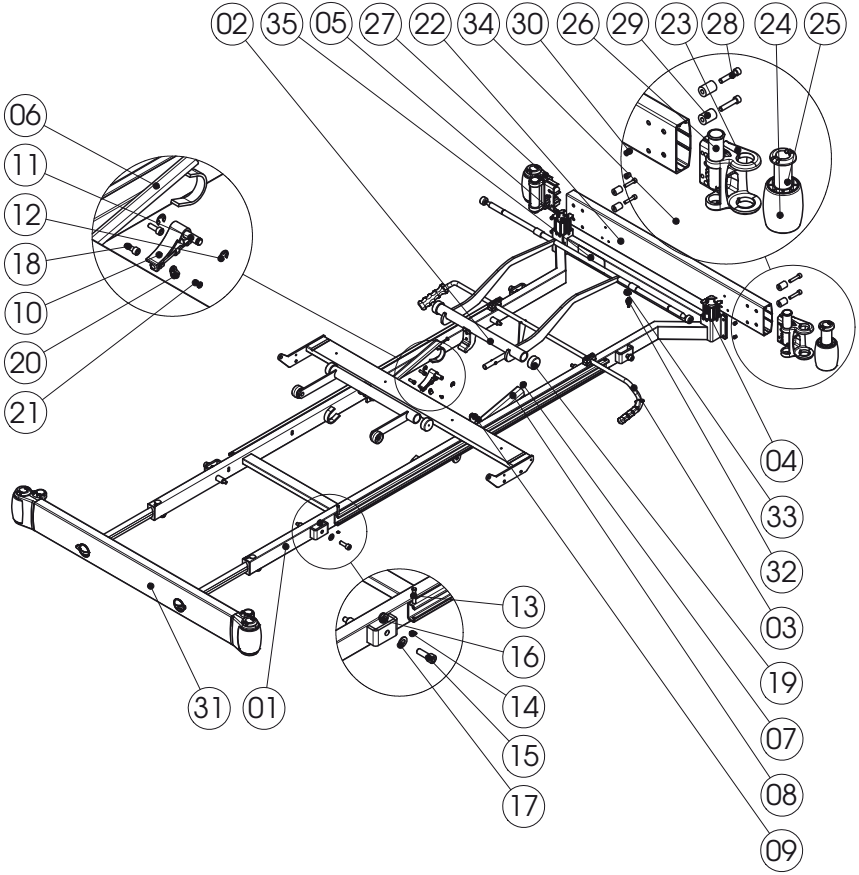
# Frame | Frame | Frame with dynamic bed extension (optional) 8/8

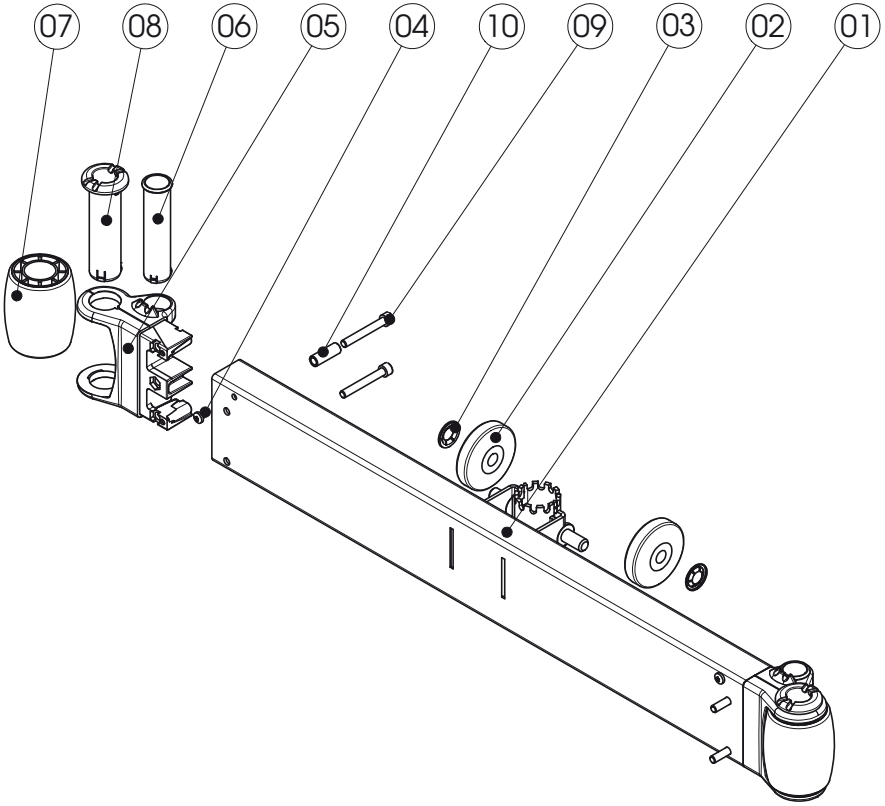
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 18 | SR532 | Cheese-head screw M6x18 DIN 912, galvanized | 4 |
| 19 | KT3198 | Motor frame fitting, back section bearing cap | 4 |
| 20 | SR038 | Cable clip | 1 |
| 21 | SR2119 | Oval-head screw M4x8 DIN 7985 | 1 |
| 22 | AP3102-01 | Foot panel | 1 |
| 23 | F2861-02 | Foot panel corner piece, left | 1 |
| 24 | KT2029 | Spacing roll | 2 |
| 25 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 26 | KT2030 | Drip holder insertion sleeve | 2 |
| 27 | F2860-02 | Foot panel corner piece, right | 1 |
| 28 | SR2607 | Cheese-head screw M8x40 DIN 912, hexagon socket, galvanized | 4 |
| 29 | AP919-01 | Spacer 20x8.2x28 | 4 |
| 30 | SR372 | Screw M8x16 Taptite® II | 4 |
| 31 | BG4771-01 | Dynamic bed extension | 1 |
| 32 | E421 | POAG plug | 1 |
| 33 | E422 | Color marking disk | 1 |
| 34 | T2016 | Adhesive label, potential connection | 1 |
| 35 | T001-01 | Type label | 1 |



# Frame | Frame | Head panel with single trapeze bar (optional) 1/2

Head panel with single trapeze bar
for lying surface 90 cm;
BG4591-01

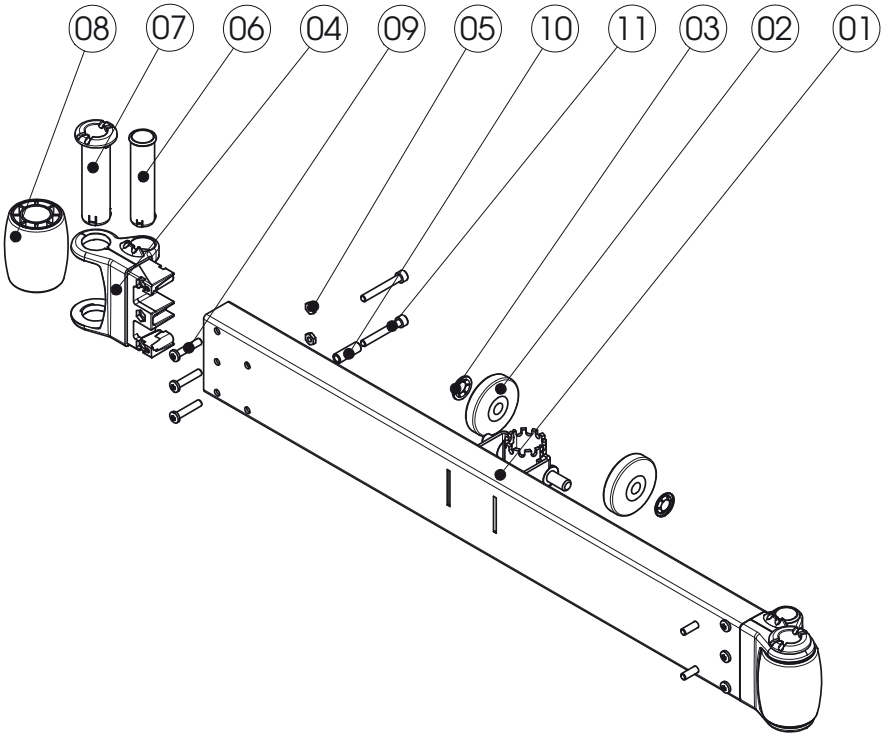
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3739-01 | Head panel | 1 |
| 02 | R197 | Wall spacing roll | 2 |
| 03 | SR479 | Locking washer 14 Starlock® A2 | 2 |
| 04 | SR2234 | Oval-head screw M6x12<br>DIN 7500, self-tapping,<br>Form C, Torx, galvanized | 2 |
| 05 | F3440 | Corner piece | 2 |
| 06 | KT2030 | Drip holder insertion sleeve | 2 |
| 07 | KT2029 | Spacing roll | 2 |
| 08 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 09 | SR2058 | Cheese-head screw M8x60<br>DIN 912, galvanized | 4 |
| 10 | F2465 | Spacer sleeve | 2 |



# Frame | Frame | Head panel with single trapeze bar (optional) 2/2

Head panel with single trapeze bar
for lying surface 100 cm;
BG4592-01

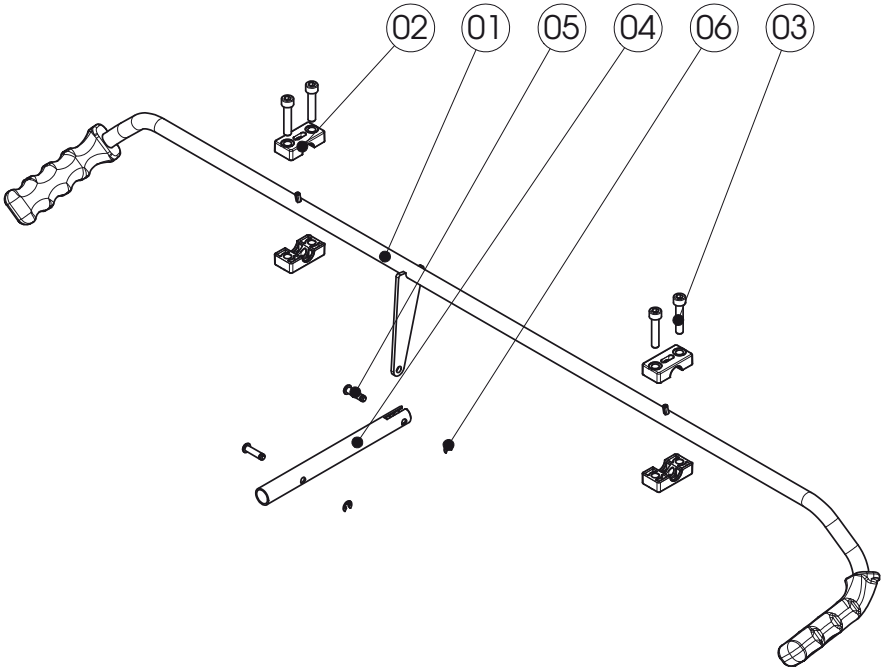
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3740-01 | Head panel | 1 |
| 02 | R197 | Wall spacing roll | 2 |
| 03 | SR479 | Locking washer 14 Starlock® A2 | 2 |
| 04 | F3440 | Corner piece | 2 |
| 05 | SR2617 | Hexagonal nut M8 DIN 439, galvanized | 6 |
| 06 | KT2030 | Drip holder insertion sleeve | 2 |
| 07 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 08 | KT2029 | Spacing roll | 2 |
| 09 | SR2618 | Oval-head screw M8x40 ISO 7380 10.9, Torx | 6 |
| 10 | F2465 | Spacer sleeve | 4 |
| 11 | SR2058 | Cheese-head screw M8x60 DIN 912, galvanized | 4 |



# Frame | Frame | CPR (cardiopulmonary resuscitation)

CPR;
BG4686

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4685 | CPR actuation | 1 |
| 02 | KT3151 | Bearing block | 4 |
| 03 | SR094 | Cheese-head screw M6x30 DIN 912, galvanized | 4 |
| 04 | F3722 | Extension | 1 |
| 05 | SR2630 | Safety bolt Ø8xØ5x19x16, A2 | 2 |
| 06 | SR2441 | Locking washer 4 DIN 6799, A2 | 2 |



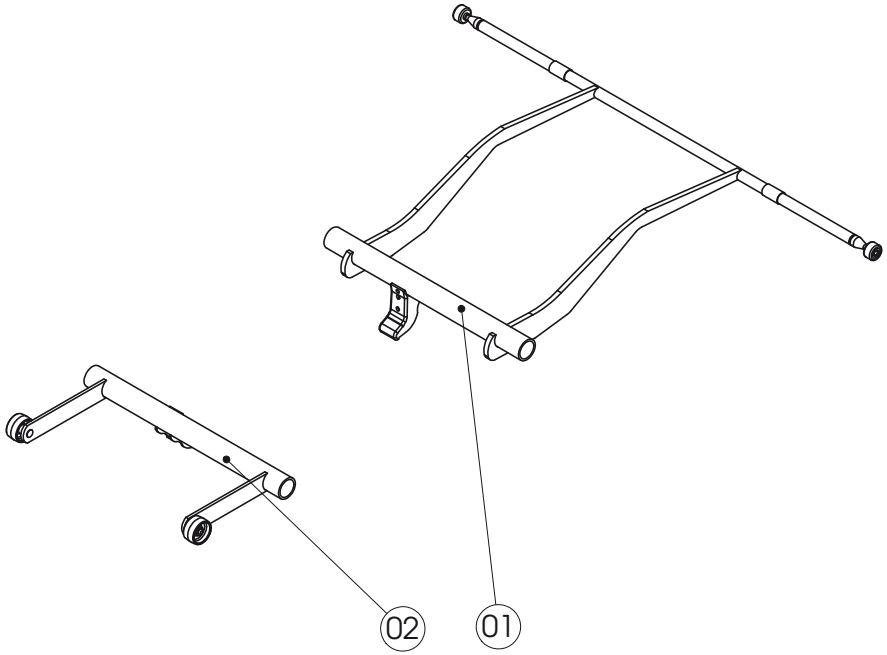
# Frame | Frame | Motor frame fitting set

Motor frame fitting set for lying surface 90 cm;
BG4807

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4808-01 | Motor frame fitting, back section | 1 |
| 02 | BG4809 | Motor frame fitting, upper leg section | 1 |

Motor frame fitting set for lying surface 100 cm;
BG4935

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4934-01 | Motor frame fitting, back section | 1 |
| 02 | BG4809 | Motor frame fitting, upper leg section | 1 |



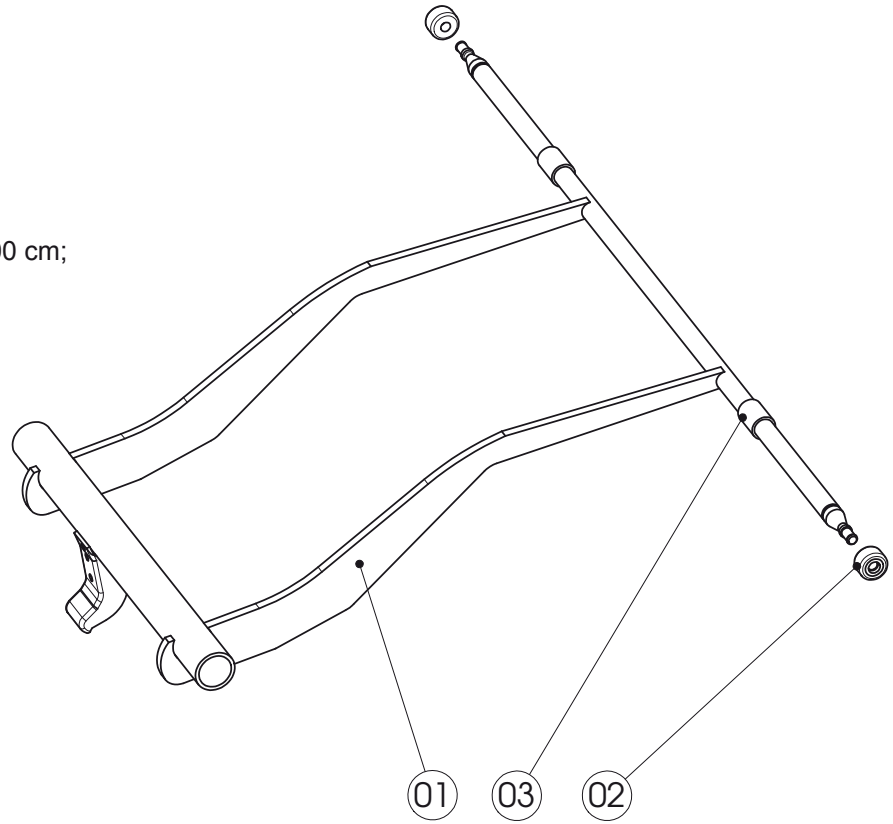
# Frame | Frame | Motor frame fitting set | Motor frame fitting, back section

Motor frame fitting, back section for lying surface 90 cm;
BG4808-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3806-01 | Motor frame fitting, back section | 1 |
| 02 | KT224 | Castor | 2 |
| 03 | E2436 | Heat shrinkable tube Ø18mm | 2 |

Motor frame fitting, back section for lying surface 100 cm;
BG4934-01

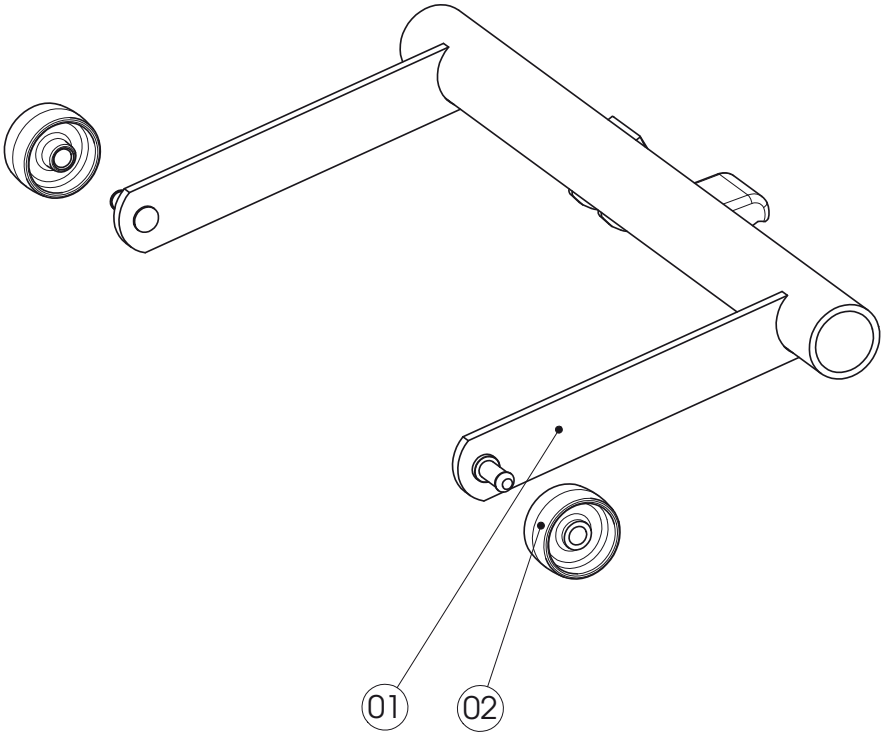
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3842 | Motor frame fitting, back section | 1 |
| 02 | KT224 | Castor | 2 |
| 03 | E2436 | Heat shrinkable tube Ø18mm | 2 |



# Frame | Frame | Motor frame fitting set | Motor frame fitting, upper leg section

Motor frame fitting, back section
for lying surface 90-100 cm;
BG4809

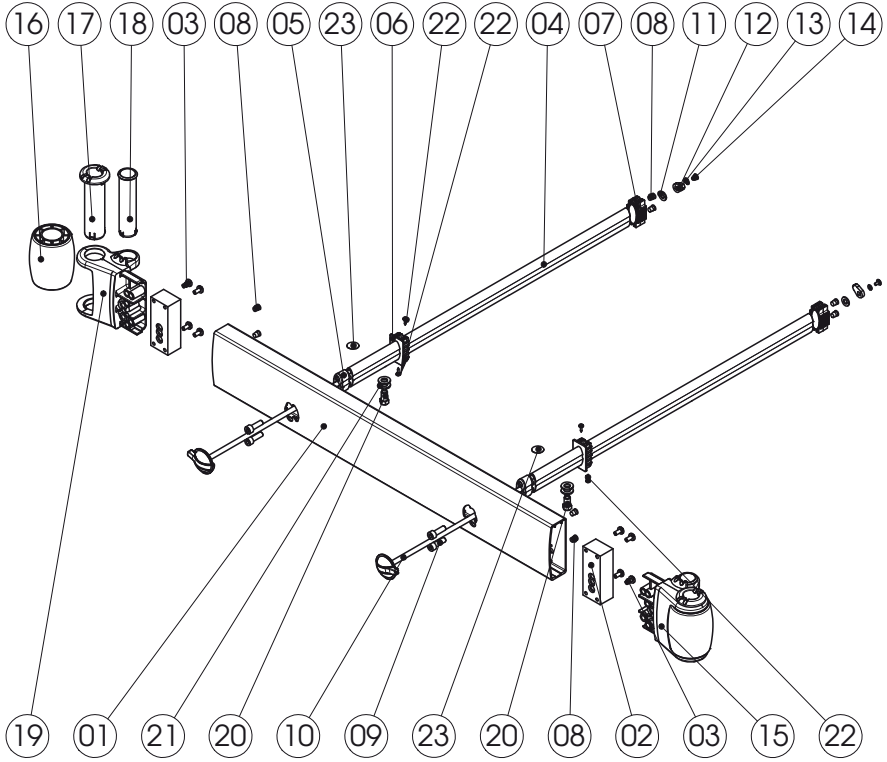
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3807-01 | Motor frame fitting, upper leg section | 1 |
| 02 | KT2555 | Castor | 2 |



# Frame | Dynamic bed extension (optional) 1/4

Dynamic bed extension for lying surface 90 cm (optional);
BG4770-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3540 | Foot panel | 1 |
| 02 | F2969-02 | Bearing block | 2 |
| 03 | SR2234 | Oval-head screw M6x12 DIN 7500, self-tapping, Form C, Torx, galvanized | 8 |
| 04 | AP3542 | Guide profile | 2 |
| 05 | KT2822-01 | Cover cap | 2 |
| 06 | KT3184 | Locking cap | 2 |
| 07 | KT3185 | Mounting slide | 2 |
| 08 | SR372 | M8x16 Taptite® II | 8 |
| 09 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 4 |
| 10 | BG4772 | Unlocking set | 1 |
| 11 | SR697 | Washer Ø8.4 | 2 |
| 12 | KT2974 | Locking lever | 2 |
| 13 | SR630 | Washer Ø4.3 A2 | 2 |
| 14 | SR059 | Oval-head screw M4x8 | 2 |
| 15 | F2860-02 | Corner piece, right | 1 |
| 16 | KT2029 | Spacing roll | 2 |

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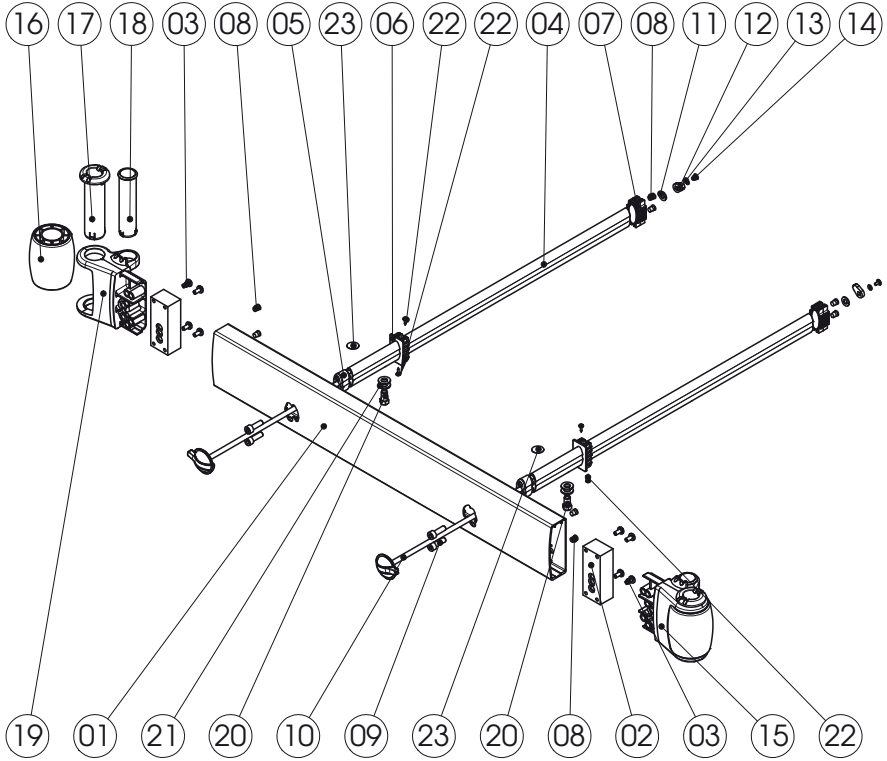
# Frame | Dynamic bed extension (optional) 2/4

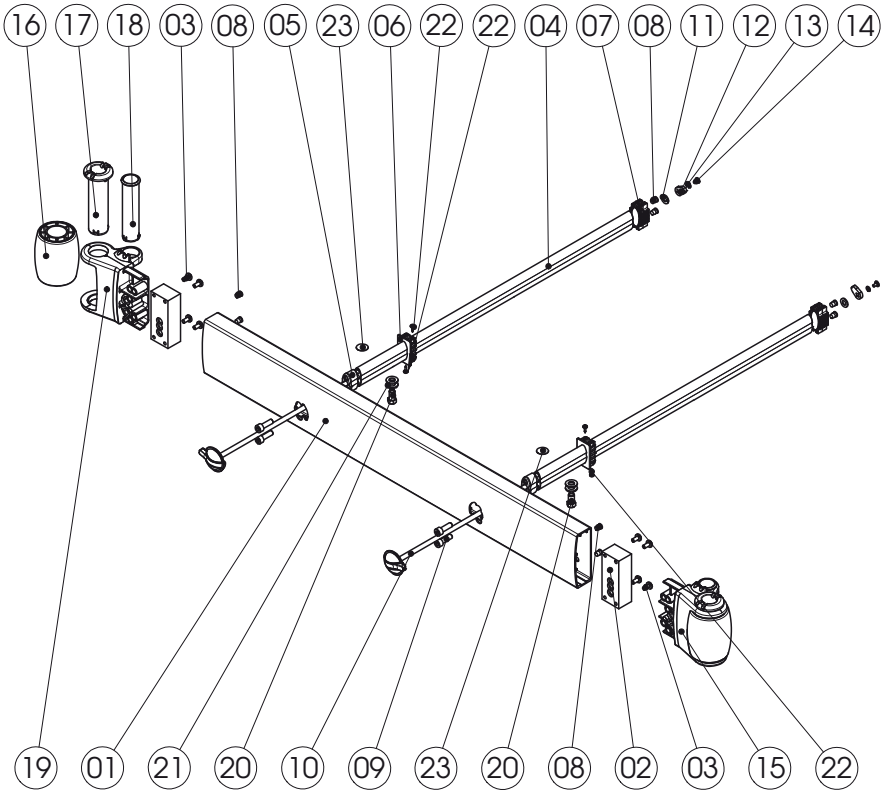
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | KT2031-02 | Corner piece insertion sleeve | 2 |
| 18 | KT2030 | Drip holder insertion sleeve | 2 |
| 19 | F2861-02 | Corner piece, left | 1 |
| 20 | SR2598 | Hexagon screw with spigot M10x20 DIN 561 | 2 |
| 21 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 22 | SR2036 | Self-tapping screw 3.9x12, Torx, galvanized | 4 |
| 23 | T2033 | Adhesive label | 2 |



# Frame | Dynamic bed extension (optional) 3/4

Dynamic bed extension for lying surface 100 cm (optional);
BG4771-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3541 | Foot panel | 1 |
| 02 | F2969-02 | Bearing block | 2 |
| 03 | SR2234 | Oval-head screw M6x12<br>DIN 7500, self-tapping,<br>Form C, Torx, galvanized | 8 |
| 04 | AP3542 | Guide profile | 2 |
| 05 | KT2822-01 | Cover cap | 2 |
| 06 | KT3184 | Locking cap | 2 |
| 07 | KT3185 | Mounting slide | 2 |
| 08 | SR372 | M8x16 Taptite® II | 8 |
| 09 | SR748 | Cheese-head screw M8x25<br>DIN 7500-EE, self-tapping,<br>hexagon socket, galvanized | 4 |
| 10 | BG4772 | Unlocking set | 1 |
| 11 | SR697 | Washer Ø8.4 | 2 |
| 12 | KT2974 | Locking lever | 2 |
| 13 | SR630 | Washer Ø4.3 A2 | 2 |
| 14 | SR059 | Oval-head screw M4x8 | 2 |
| 15 | F2860-02 | Corner piece, right | 1 |
| 16 | KT2029 | Spacing roll | 2 |

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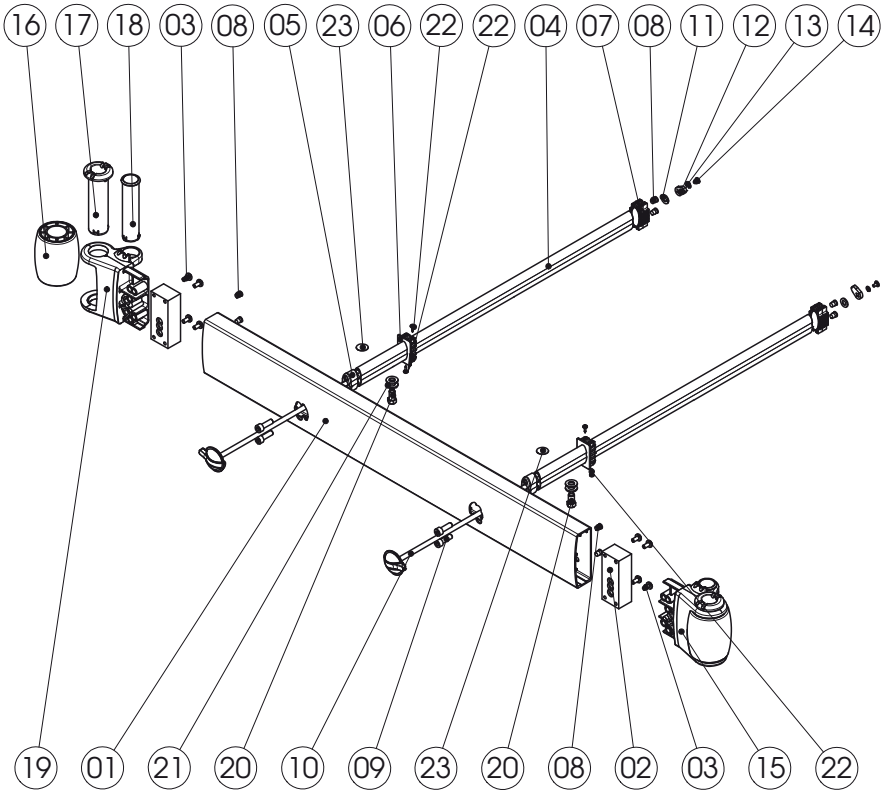
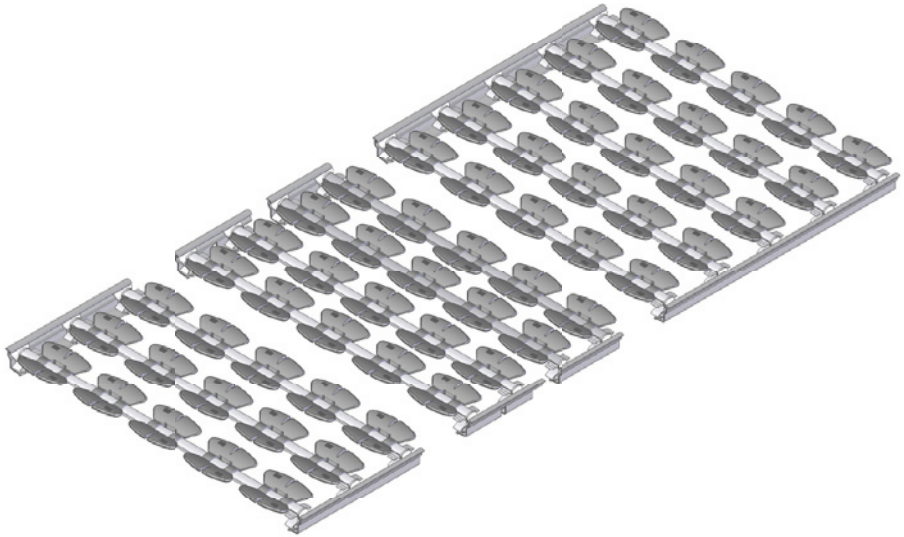
# Frame | Dynamic bed extension (optional) 4/4

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 17 | KT2031-01 | Corner piece insertion sleeve | 2 |
| 18 | KT2030 | Drip holder insertion sleeve | 2 |
| 19 | F2861-02 | Corner piece, left | 1 |
| 20 | SR2598 | Hexagon screw with spigot M10x20 DIN 561 | 2 |
| 21 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 22 | SR2036 | Self-tapping screw 3.9x12, Torx, galvanized | 4 |
| 23 | T2033 | Adhesive label | 2 |



# Lying surface

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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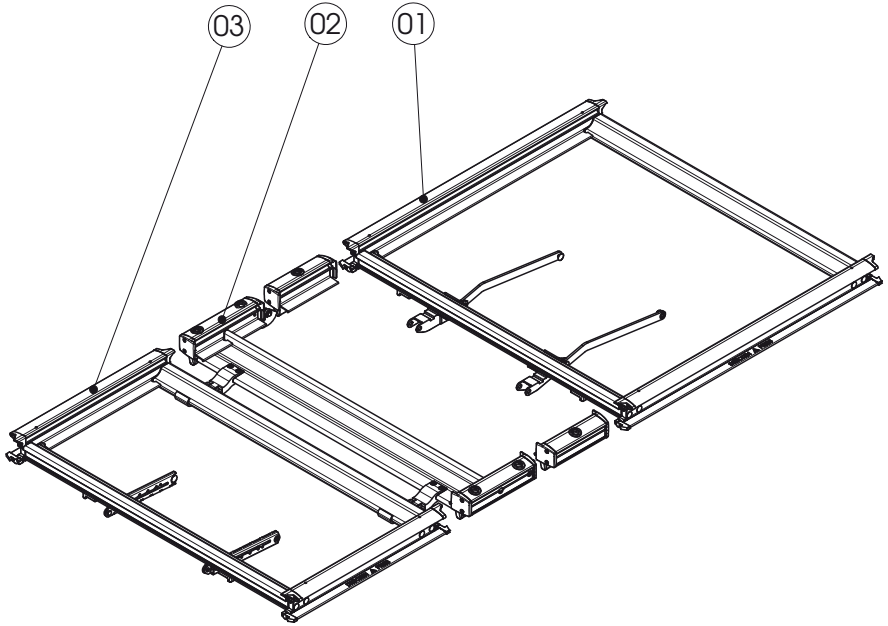
# Lying surface | Lying surface frame

Lying surface frame for lying surface

| Item | Article | Qty |
|---|---|---|
| 01 | Lying surface, back section<br>*(See below for variants)* | 1 |
| 02 | Lying surface, upper leg/seat section<br>*(See below for variants)* | 1 |
| 03 | Lying surface, lower leg section<br>*(See below for variants)* | 1 |

Lying surface frame variants

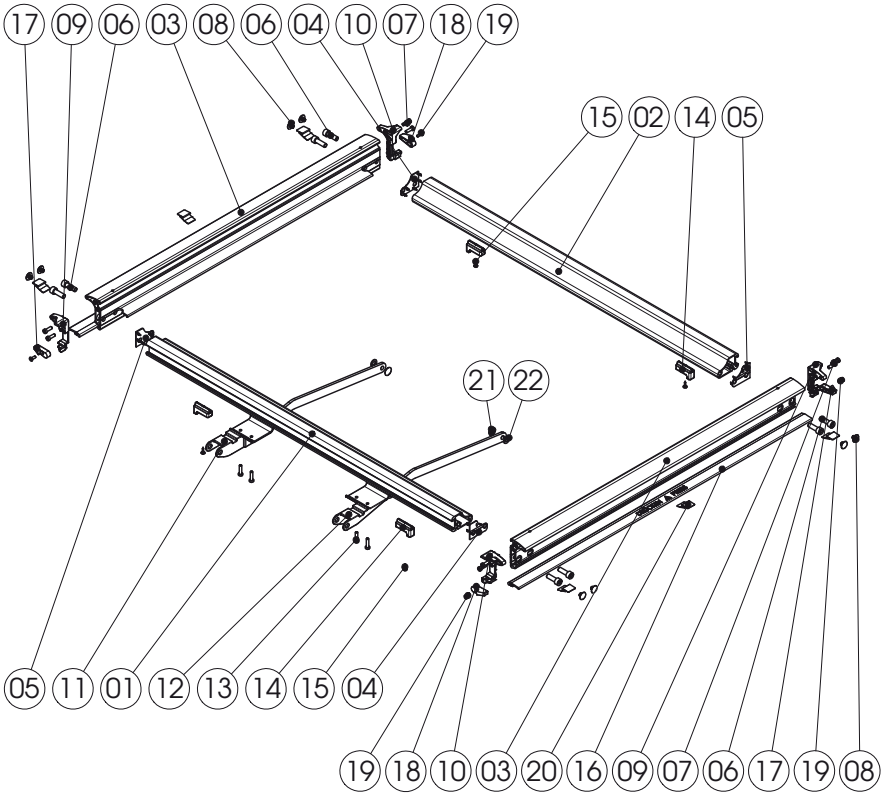
| Width | Designation | 200 | 210 |
|---|---|---|---|
| 90 | Complete assembly | BG4608-01 | BG4613-01 |
| | Back section | BG5085 | |
| | Upper leg/Seat section | BG4607 | |
| | Lower leg section | BG4606-01 | BG4609-01 |
| 100 | Complete assembly | BG4614-01 | BG4615-01 |
| | Back section | BG5087 | |
| | Upper leg/ Seat section | BG4612 | |
| | Lower leg section | BG4610-01 | BG4611-01 |



# Lying surface | Lying surface frame | Back section 1/4

Back section for lying surface 200-210x90 cm;
BG5085

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3395 | Frame cross profile, mattress retraction | 1 |
| 02 | AP354 | Frame cross profile, head end | 1 |
| 03 | AP2269-01 | Frame longitudinal profile, back section | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | BG2552-02 | Mattress retraction, left | 1 |
| 12 | BG2551-02 | Mattress retraction, right | 1 |

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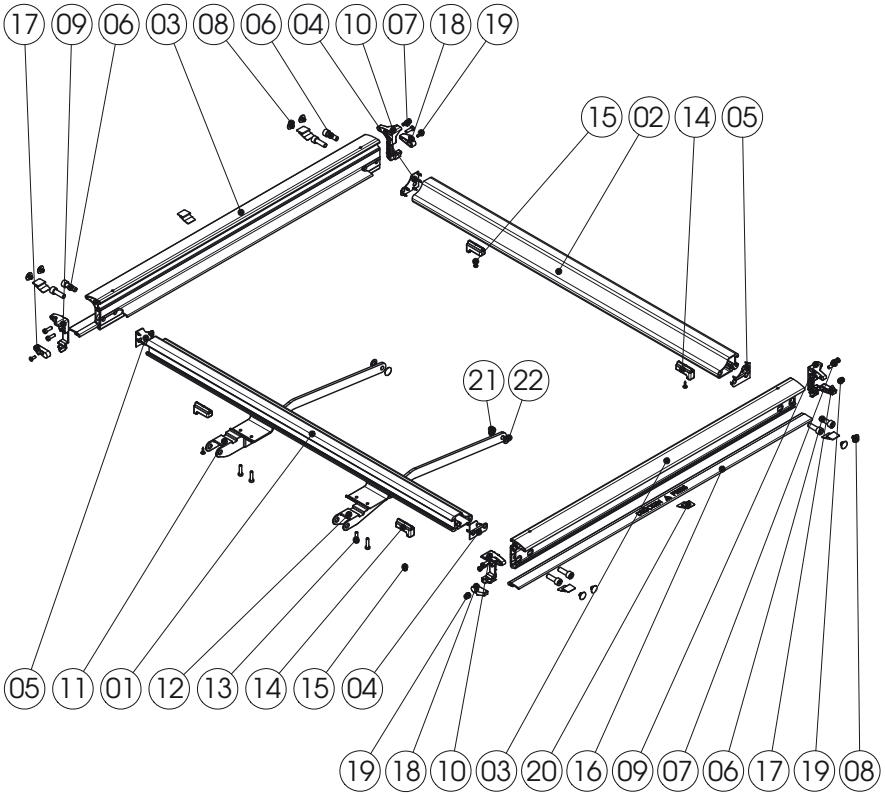
# Lying surface | Lying surface frame | Back section 2/4

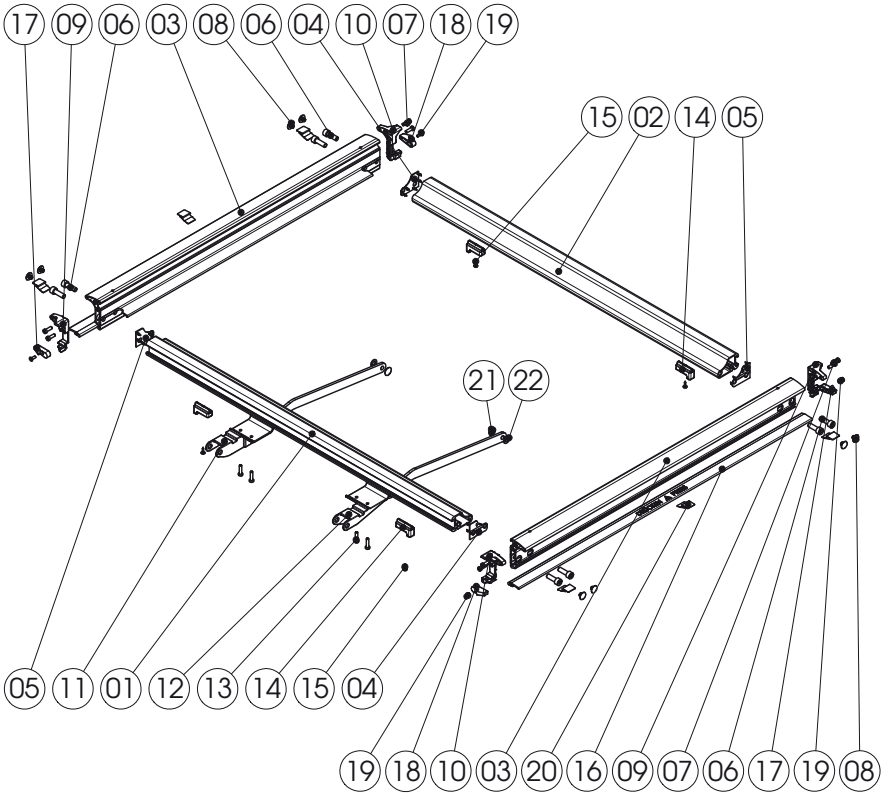
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 13 | SR750 | Cheese-head screw M5x20 DIN 7500, self-tapping, low head, hexagon socket | 4 |
| 14 | KT1198 | Slide | 4 |
| 15 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 16 | AP357 | Release profile, back section | 2 |
| 17 | F1199 | Catch, right | 2 |
| 18 | F1200 | Catch, left | 2 |
| 19 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 20 | FE1300-01 | Release spring | 6 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



# Lying surface | Lying surface frame | Back section 3/4

Back section for lying surface 200-210x100 cm;
BG5087

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3396 | Frame cross profile, mattress retraction | 1 |
| 02 | AP342 | Frame cross profile, head end | 1 |
| 03 | AP2269-01 | Frame longitudinal profile, back section | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | BG2552-02 | Mattress retraction, left | 1 |
| 12 | BG2551-02 | Mattress retraction, right | 1 |

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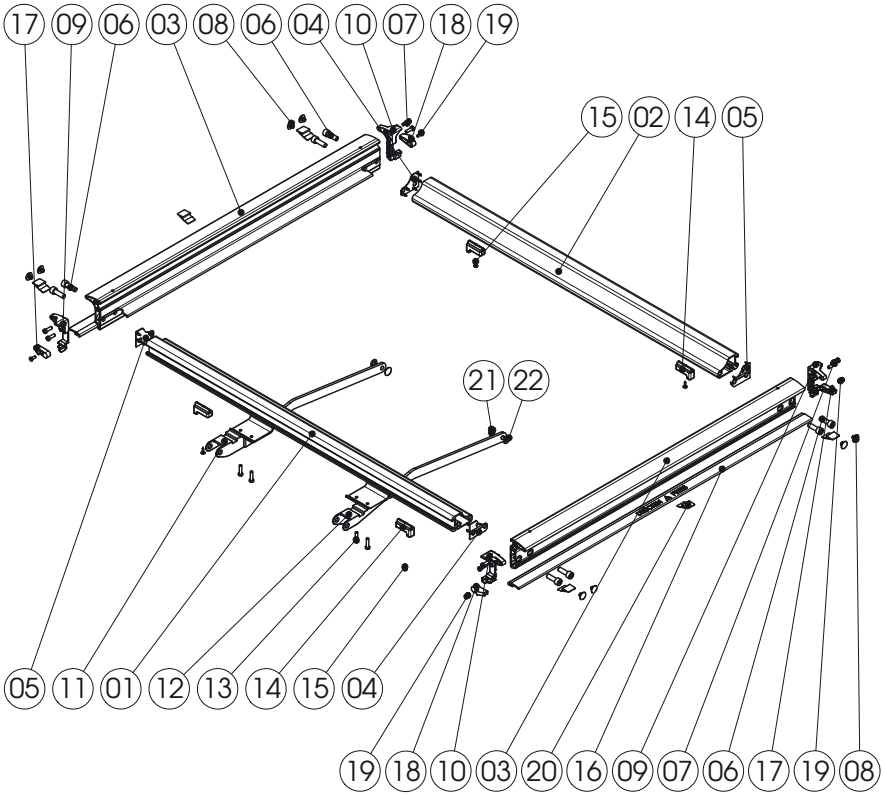
# Lying surface | Lying surface frame | Back section 4/4

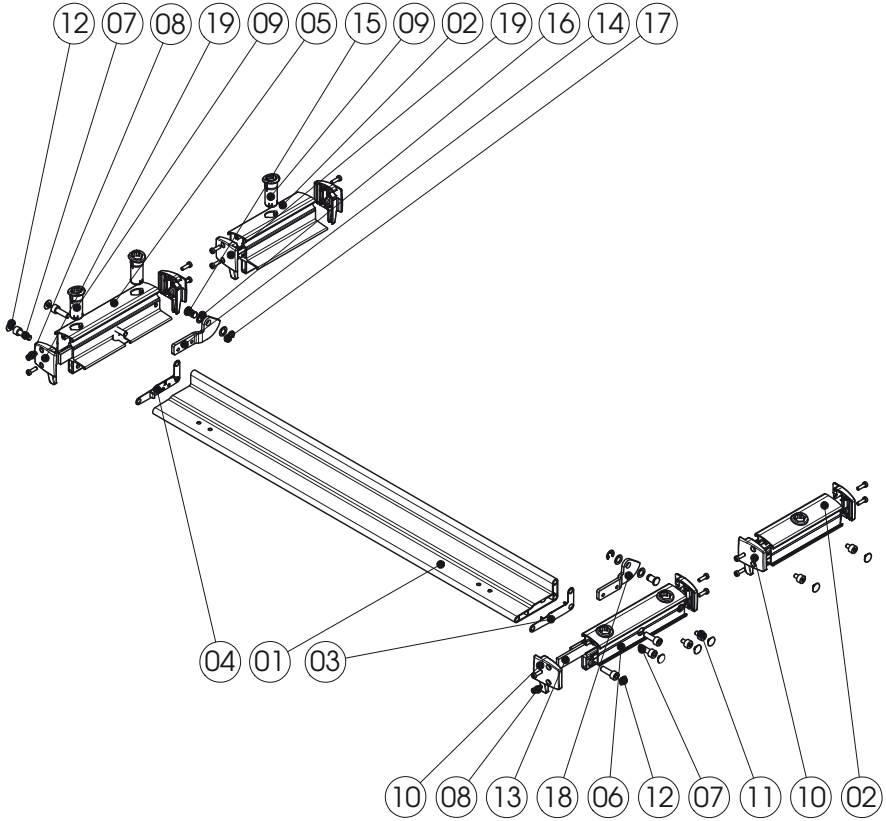
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 13 | SR750 | Cheese-head screw M5x20 DIN 7500, self-tapping, low head, hexagon socket | 4 |
| 14 | KT1198 | Slide | 4 |
| 15 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 16 | AP357 | Release profile, back section | 2 |
| 17 | F1199 | Catch, right | 2 |
| 18 | F1200 | Catch, left | 2 |
| 19 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 20 | FE1300-01 | Release spring | 6 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



# Lying surface | Lying surface frame | Upper leg/Seat section 1/4

Upper leg/Seat section for lying surface 90 cm;
BG4607

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3366 | Frame cross profile, upper leg section | 1 |
| 02 | AP2274 | Frame longitudinal profile, seat section | 2 |
| 03 | KT2276 | Form disk, upper leg section, right | 1 |
| 04 | KT2277 | Form disk, upper leg section, left | 1 |
| 05 | AP2276-01 | Frame longitudinal profile, upper leg section, right | 1 |
| 06 | AP2275-01 | Frame longitudinal profile, upper leg section, left | 1 |
| 07 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 6 |
| 08 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 16 |
| 09 | KT242 | Receptacle | 6 |
| 10 | KT1178 | Cap, right | 4 |
| 11 | SR2192 | Cheese-head screw M6x10 DIN 7500, head M8, self-tapping, hexagon socket, galvanized | 8 |

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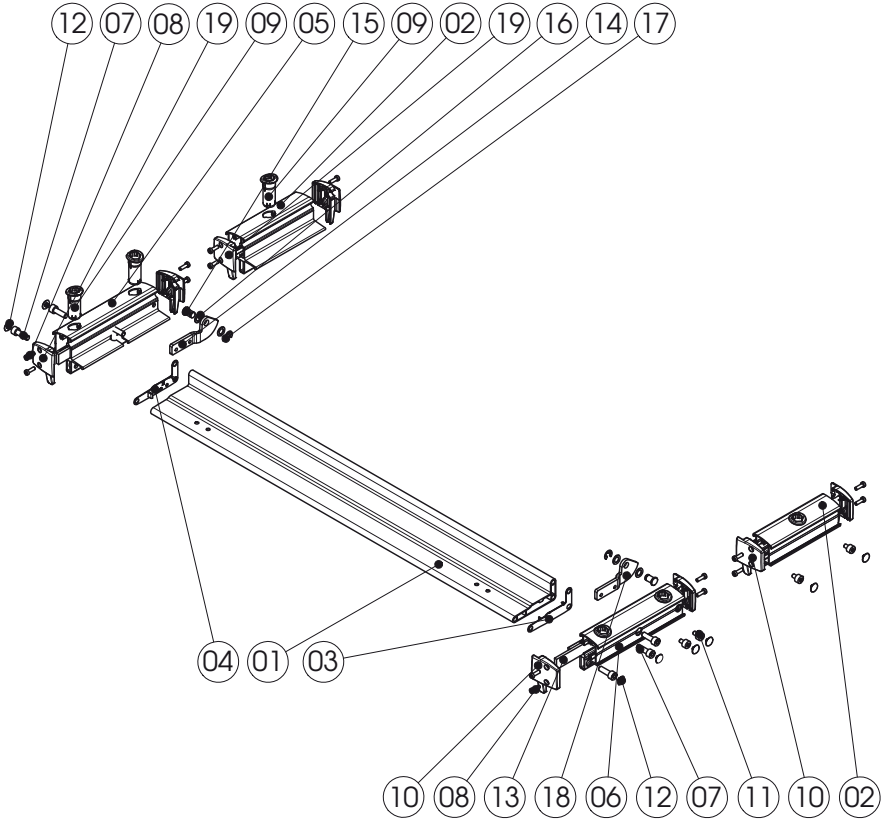
# Lying surface | Lying surface frame | Upper leg/Seat section 2/4

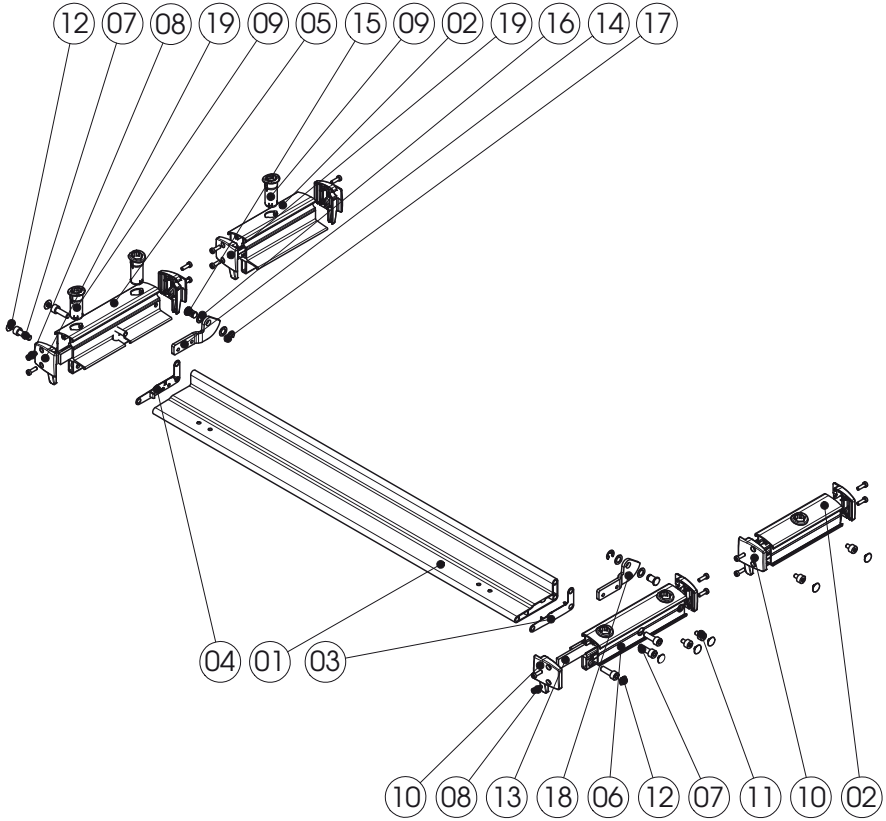
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 12 | KT298 | Plug 5mm | 12 |
| 13 | F2308 | Strengthening link plate for upper leg section | 2 |
| 14 | F3780 | Seat section bracket, right | 1 |
| 15 | F3550 | Bolt, seat section bracket | 2 |
| 16 | SR277 | Washer, plastic Ø10xØ16x1 | 4 |
| 17 | SR2384 | Locking washer 8 DIN 6799, galvanized | 2 |
| 18 | F3781 | Seat section bracket, left | 1 |
| 19 | KT1179 | Cap, left | 4 |



# Lying surface | Lying surface frame | Upper leg/Seat section 3/4

Upper leg/Seat section for lying surface 100 cm;
BG4612

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3368 | Frame cross profile, upper leg section | 1 |
| 02 | AP2274 | Frame longitudinal profile, seat section | 2 |
| 03 | KT2276 | Form disk, upper leg section, right | 1 |
| 04 | KT2277 | Form disk, upper leg section, left | 1 |
| 05 | AP2276-01 | Frame longitudinal profile, upper leg section, right | 1 |
| 06 | AP2275-01 | Frame longitudinal profile, upper leg section, left | 1 |
| 07 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 6 |
| 08 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 16 |
| 09 | KT242 | Receptacle | 6 |
| 10 | KT1178 | Cap, right | 4 |
| 11 | SR2192 | Cheese-head screw M6x10 DIN 7500, head M8, self-tapping, hexagon socket, galvanized | 8 |

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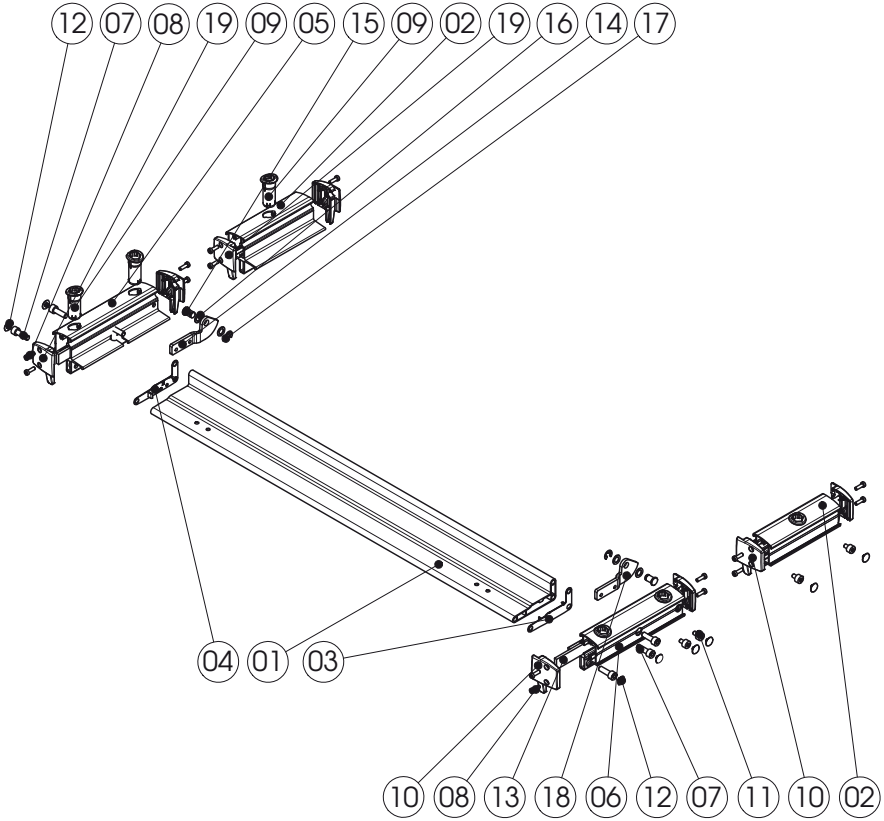
# Lying surface | Lying surface frame | Upper leg/Seat section 4/4

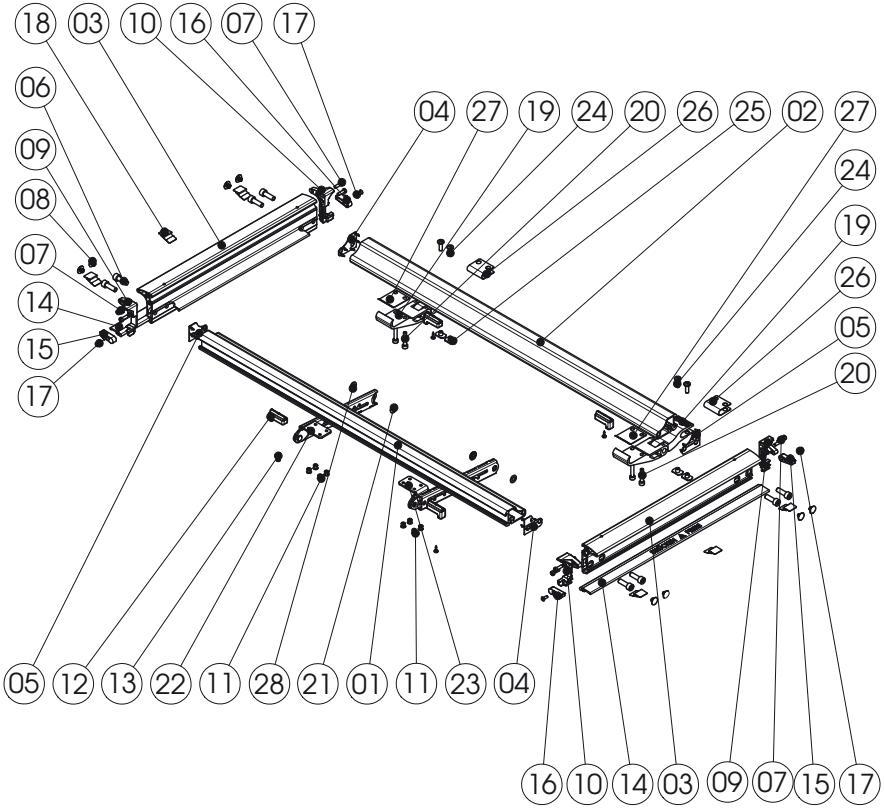
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 12 | KT298 | Plug 5mm | 12 |
| 13 | F2308 | Strengthening link plate for upper leg section | 2 |
| 14 | F3780 | Seat section bracket, right | 1 |
| 15 | F3550 | Bolt, seat section bracket | 2 |
| 16 | SR277 | Washer, plastic Ø10xØ16x1 | 4 |
| 17 | SR2384 | Locking washer 8 DIN 6799, galvanized | 2 |
| 18 | F3781 | Seat section bracket, left | 1 |
| 19 | KT1179 | Cap, left | 4 |



# Lying surface | Lying surface frame | Lower leg section 1/8

Lower leg section for lying surface 200x90 cm;
BG4606-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3397 | Frame cross profile, Rastomat | 1 |
| 02 | AP3365 | Frame cross profile, hinge band | 1 |
| 03 | AP2270-01 | Frame longitudinal profile | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | SR2196 | Blind rivet 4.8x10 | 8 |
| 12 | KT1198 | Slide | 4 |
| 13 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 14 | AP362 | Release profile, lower leg section | 2 |
| 15 | F1199 | Catch, right | 2 |

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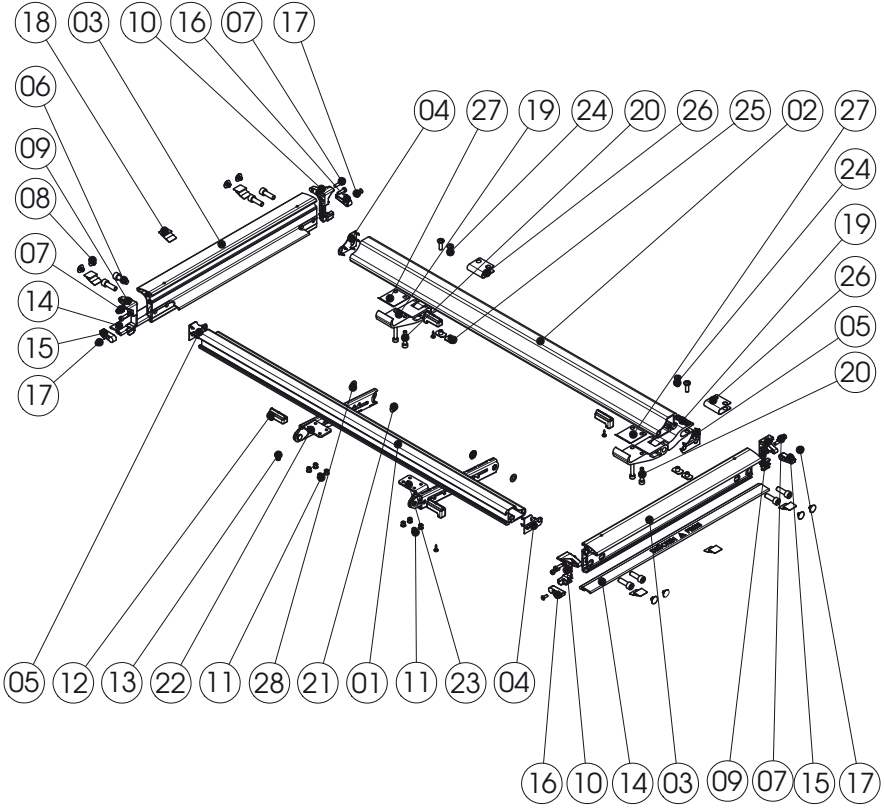
# Lying surface | Lying surface frame | Lower leg section 2/8

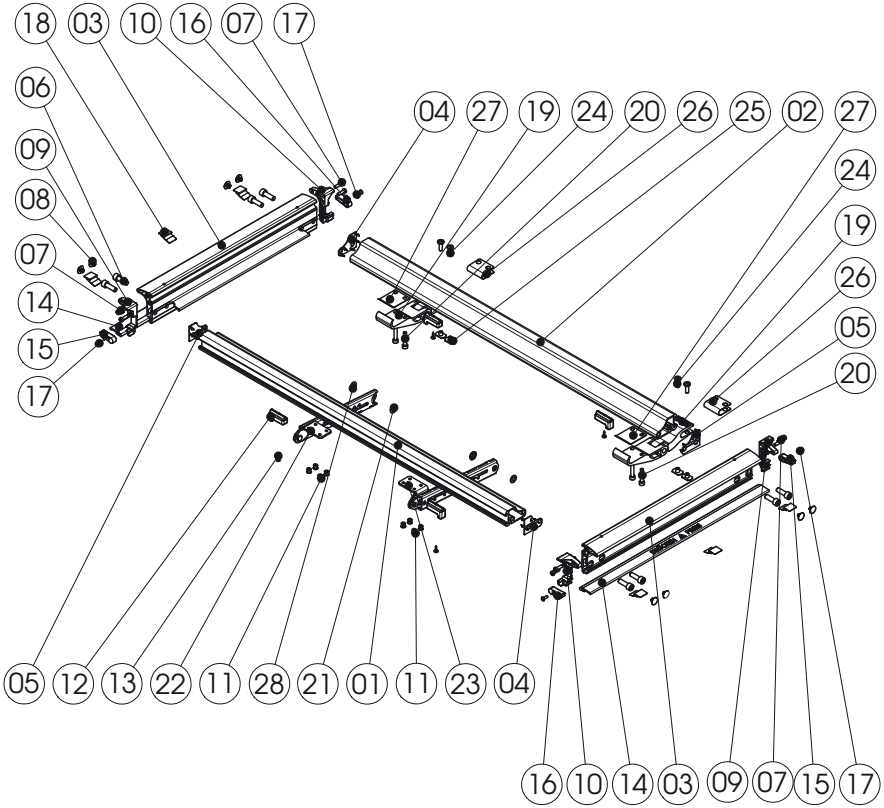
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 16 | F1200 | Catch, left | 2 |
| 17 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 18 | FE1300-01 | Release spring | 6 |
| 19 | BG4604 | Hinge band | 2 |
| 20 | SR747 | Cheese-head screw M6x30 DIN 7500-EE, self-tapping, hexagon socket | 4 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | BG2538 | Rastomat, right with bracket | 1 |
| 23 | BG2539 | Rastomat, left with bracket | 1 |
| 24 | SR2447 | Oval-head screw M6x18 A2 DIN 7985 | 4 |
| 25 | SR464 | Weld-on nut M6x8.5 A2 | 4 |
| 26 | KT3203 | Shim, frame cross profile, upper leg section | 2 |
| 27 | KT3202 | Shim, frame cross profile, lower leg section | 2 |
| 28 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



# Lying surface | Lying surface frame | Lower leg section 3/8

Lower leg section for lying surface 210x90 cm;
BG4609-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3397 | Frame cross profile, Rastomat | 1 |
| 02 | AP3365 | Frame cross profile, hinge band | 1 |
| 03 | AP2272-01 | Frame longitudinal profile | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | SR2196 | Blind rivet 4.8x10 | 8 |
| 12 | KT1198 | Slide | 4 |
| 13 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 14 | AP466 | Release profile, lower leg section | 2 |
| 15 | F1199 | Catch, right | 2 |

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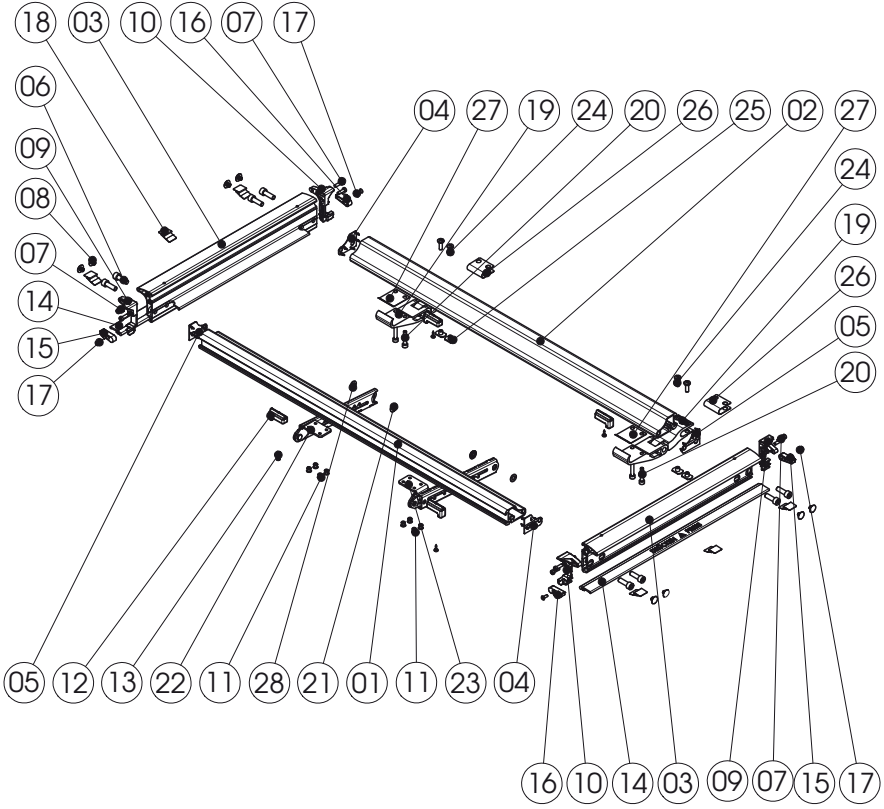
# Lying surface | Lying surface frame | Lower leg section 4/8

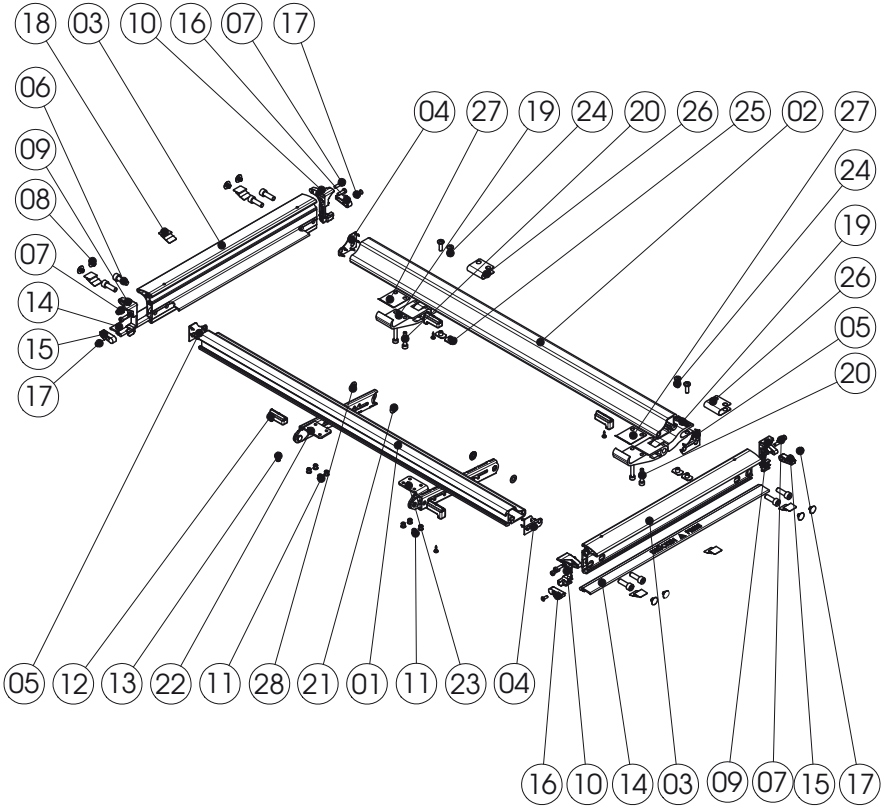
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 16 | F1200 | Catch, left | 2 |
| 17 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 18 | FE1300-01 | Release spring | 6 |
| 19 | BG4604 | Hinge band | 2 |
| 20 | SR747 | Cheese-head screw M6x30 DIN 7500-EE, self-tapping, hexagon socket | 4 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | BG2636 | Rastomat, left with bracket | 1 |
| 23 | BG2635 | Rastomat, right with bracket | 1 |
| 24 | SR2447 | Oval-head screw M6x18 A2 DIN 7985 | 4 |
| 25 | SR464 | Weld-on nut M6x8.5 A2 | 4 |
| 26 | KT3203 | Shim, frame cross profile, upper leg section | 2 |
| 27 | KT3202 | Shim, frame cross profile, lower leg section | 2 |
| 28 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



# Lying surface | Lying surface frame | Lower leg section 5/8

Lower leg section for lying surface 200x100 cm;
BG4610-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3398 | Frame cross profile, Rastomat | 1 |
| 02 | AP3367 | Frame cross profile, hinge band | 1 |
| 03 | AP2270-01 | Frame longitudinal profile | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | SR2196 | Blind rivet 4.8x10 | 8 |
| 12 | KT1198 | Slide | 4 |
| 13 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 14 | AP362 | Release profile, lower leg section | 2 |
| 15 | F1199 | Catch, right | 2 |

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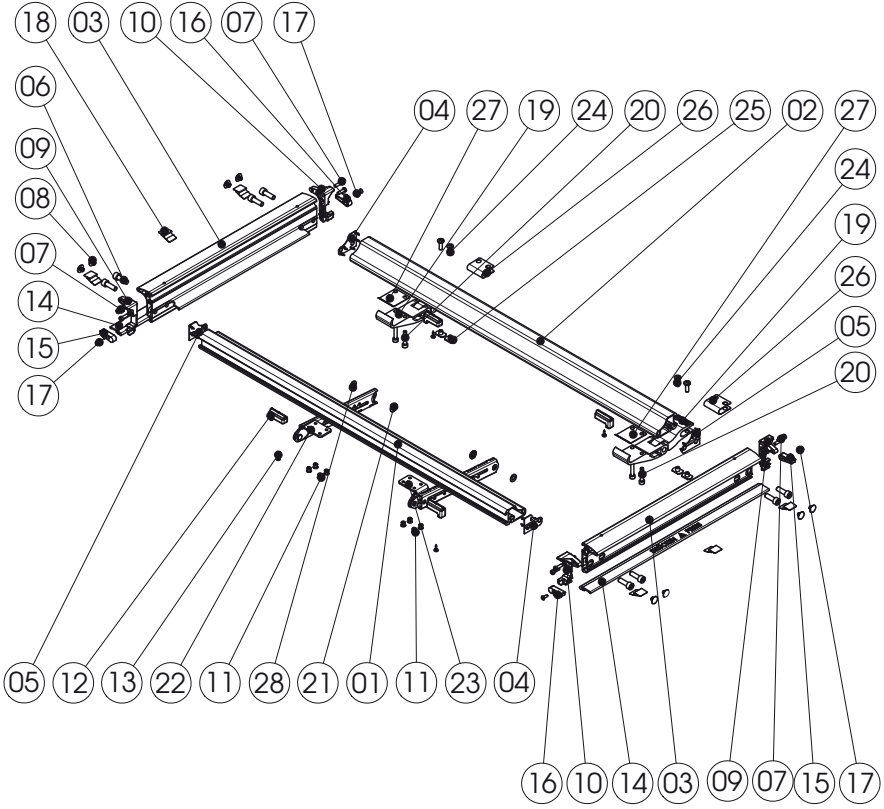
# Lying surface | Lying surface frame | Lower leg section 6/8

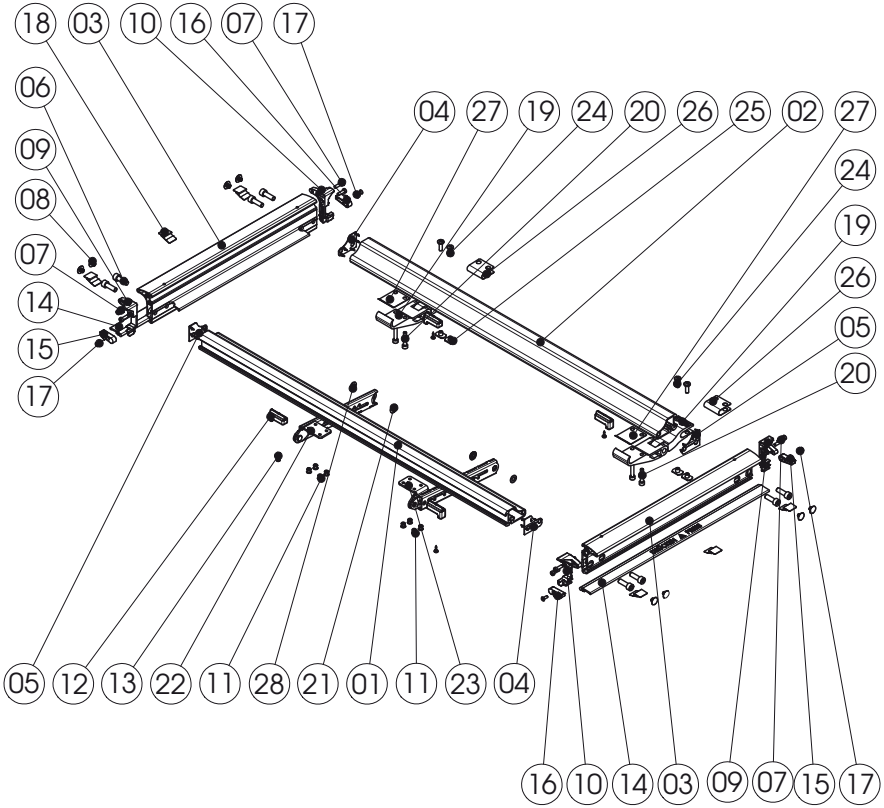
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 16 | F1200 | Catch, left | 2 |
| 17 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 18 | FE1300-01 | Release spring | 6 |
| 19 | BG4604 | Hinge band | 2 |
| 20 | SR747 | Cheese-head screw M6x30 DIN 7500-EE, self-tapping, hexagon socket | 4 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | BG2538 | Rastomat, right with bracket | 1 |
| 23 | BG2539 | Rastomat, left with bracket | 1 |
| 24 | SR2447 | Oval-head screw M6x18 A2 DIN 7985 | 4 |
| 25 | SR464 | Weld-on nut M6x8.5 A2 | 4 |
| 26 | KT3203 | Shim, frame cross profile, upper leg section | 2 |
| 27 | KT3202 | Shim, frame cross profile, lower leg section | 2 |
| 28 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



# Lying surface | Lying surface frame | Lower leg section 7/8

Lower leg section for lying surface 210x100 cm;
BG4611-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3398 | Frame cross profile, Rastomat | 1 |
| 02 | AP3367 | Frame cross profile, hinge band | 1 |
| 03 | AP2272-01 | Frame longitudinal profile | 2 |
| 04 | KT195-01 | Form disk, left | 2 |
| 05 | KT201-01 | Form disk, right | 2 |
| 06 | SR748 | Cheese-head screw M8x25 DIN 7500-EE, self-tapping, hexagon socket, galvanized | 8 |
| 07 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 8 |
| 08 | KT300-01 | Plug 7mm | 8 |
| 09 | KT1172-01 | Frame longitudinal profile cap, right | 2 |
| 10 | KT1173-01 | Frame longitudinal profile cap, left | 2 |
| 11 | SR2196 | Blind rivet 4.8x10 | 8 |
| 12 | KT1198 | Slide | 4 |
| 13 | SR2013 | Self-tapping screw 3.9x13 ISO 7049, Form C, oval head, galvanized | 4 |
| 14 | AP466 | Release profile, lower leg section | 2 |

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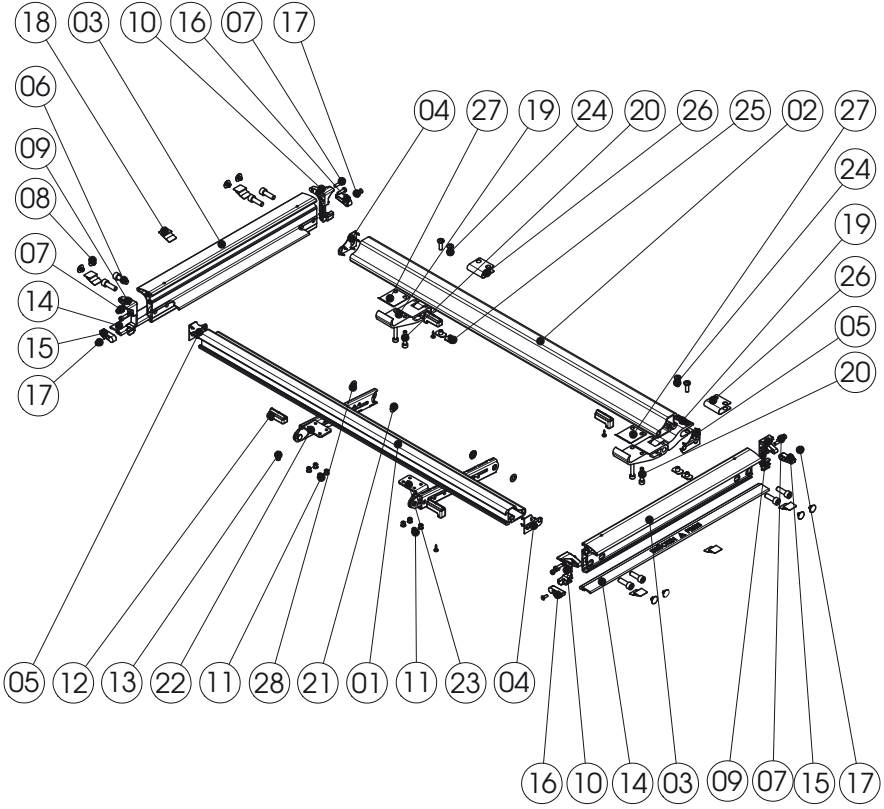
# Lying surface | Lying surface frame | Lower leg section 8/8

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 15 | F1199 | Catch, right | 2 |
| 16 | F1200 | Catch, left | 2 |
| 17 | SR128 | Countersunk screw M4x12 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 18 | FE1300-01 | Release spring | 6 |
| 19 | BG4604 | Hinge band | 2 |
| 20 | SR747 | Cheese-head screw M6x30 DIN 7500-EE, self-tapping, hexagon socket | 4 |
| 21 | SR378 | Locking washer Ø8 Starlock®, galvanized | 2 |
| 22 | BG2636 | Rastomat, left with bracket | 1 |
| 23 | BG2635 | Rastomat, right with bracket | 1 |
| 24 | SR2447 | Oval-head screw M6x18 A2 DIN 7985 | 4 |
| 25 | SR464 | Weld-on nut M6x8.5 A2 | 4 |
| 26 | KT3203 | Shim, frame cross profile, upper leg section | 2 |
| 27 | KT3202 | Shim, frame cross profile, lower leg section | 2 |
| 28 | KT118 | Washer, plastic Ø8.4xØ15x1.5 | 2 |



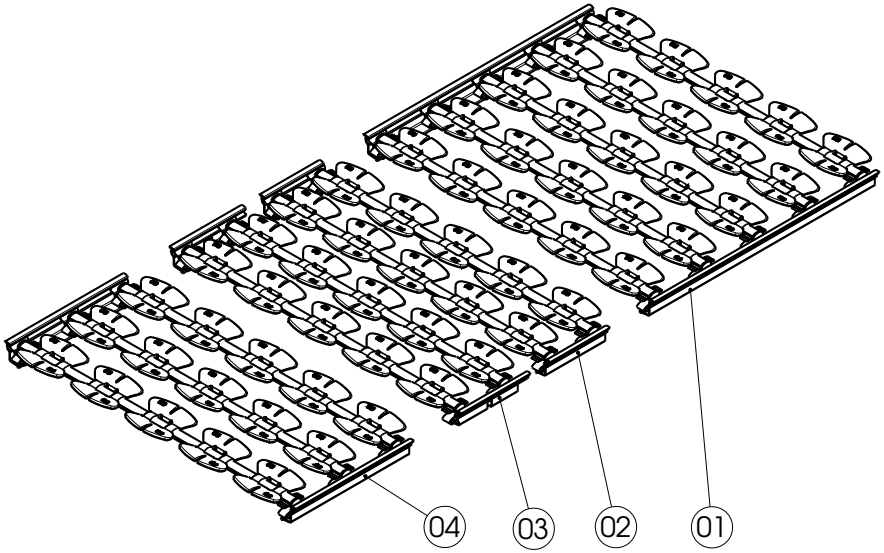
# Lying surface | MiS® lying surface

MiS® lying surface for lying surface

| Item | Article | Qty |
|---|---|---|
| 01 | MiS® Lying surface, back section *(Variants, see below)* | 1 |
| 02 | MiS® lying surface, seat section *(Variants, see below)* | 1 |
| 03 | MiS® lying surface, upper leg section *(Variants, see below)* | 1 |
| 04 | MiS® lying surface, lower leg section *(Variants, see below)* | 1 |

MiS® lying surface, variants

| Width | Designation | 200 | 210 |
|---|---|---|---|
| 90 | Complete assembly | BG1280 | BG1424 |
| | Back section | BG1214 | |
| | Seat section | BG1269 | |
| | Upper leg section | BG1270 | |
| | Lower leg section | BG1215 | BG1217 |
| 100 | Complete assembly | BG1427 | BG1428 |
| | Back section | BG1271 | |
| | Seat section | BG1277 | |
| | Upper leg section | BG1278 | |
| | Lower leg section | BG1272 | BG1274 |



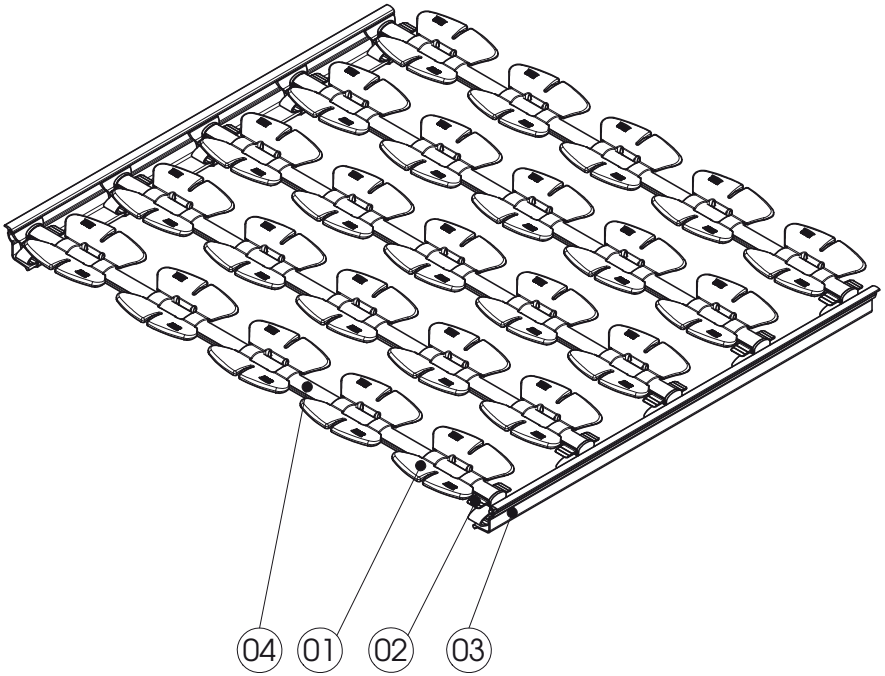
# Lying surface | MiS® lying surface | Back section

Back section for lying surface 200-210x90 cm;
BG1214

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 25 |
| 02 | KT2166-02 | Spring element with catch | 10 |
| 03 | KT2181-01 | Lying surface profile, back section | 2 |
| 04 | KT2186 | Supporting profile | 5 |

Back section for lying surface 200-210x100 cm;
BG1271

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 25 |
| 02 | KT2166-02 | Spring element with catch | 10 |
| 03 | KT2181-01 | Lying surface profile, back section | 2 |
| 04 | KT2227 | Supporting profile | 5 |

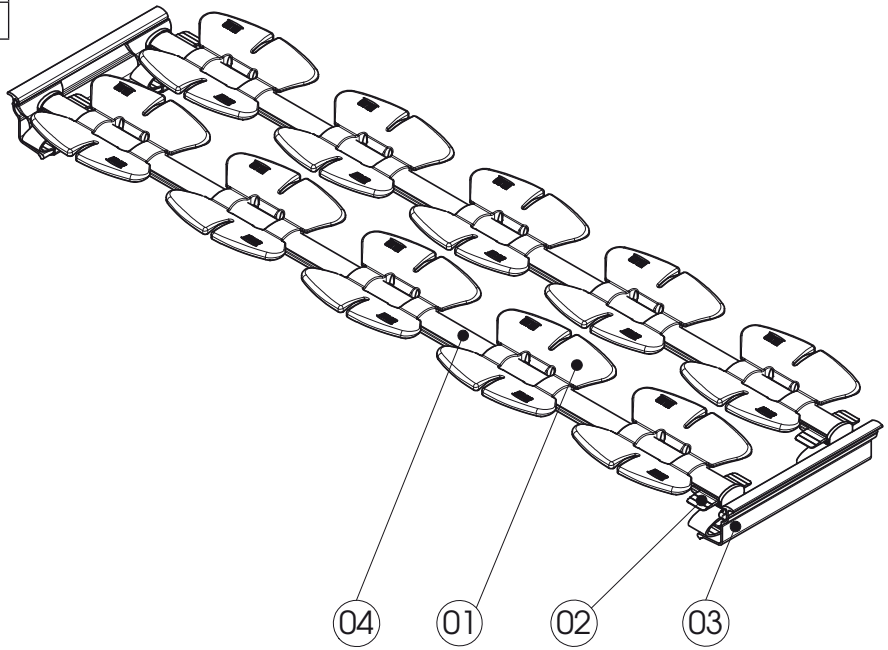


Seat section for lying surface 90 cm;
BG1269

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 10 |
| 02 | KT2166-02 | Spring element with catch | 4 |
| 03 | KT2221 | Lying surface profile, seat section | 2 |
| 04 | KT2226 | Supporting profile | 2 |

Seat section for lying surface 100 cm;
BG1277

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 10 |
| 02 | KT2166-02 | Spring element with catch | 4 |
| 03 | KT2221 | Lying surface profile, seat section | 2 |
| 04 | KT2227 | Supporting profile | 2 |



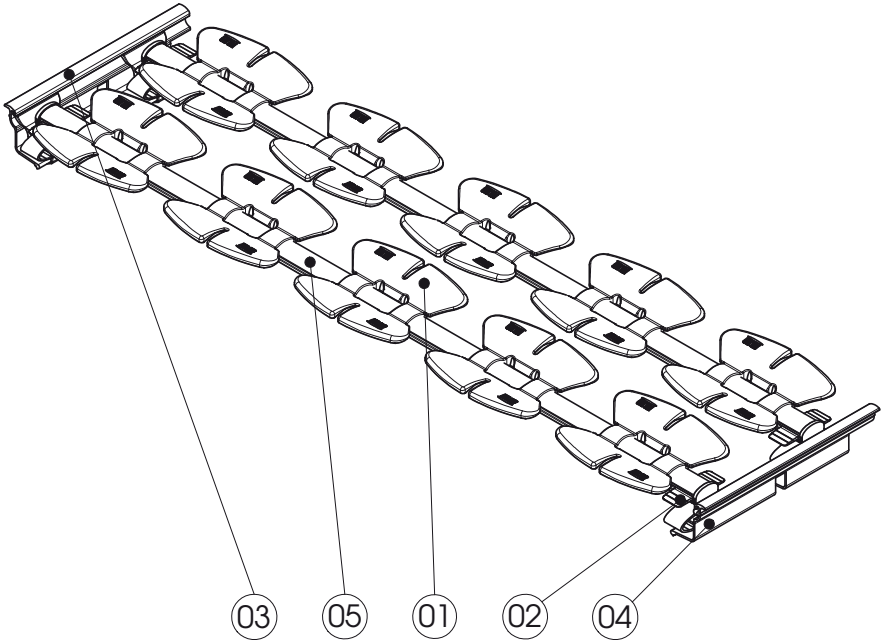
# Lying surface | MiS® lying surface / Upper leg section

Upper leg section for lying surface 90 cm;
BG1270

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 10 |
| 02 | KT2166-02 | Spring element | 4 |
| 03 | KT2222-01 | Lying surface profile, upper leg section, left | 1 |
| 04 | KT2223-01 | Lying surface profile, upper leg section, right | 1 |
| 05 | KT2186 | Supporting profile | 2 |

Upper leg section for lying surface 100 cm;
BG1278

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 10 |
| 02 | KT2166-02 | Spring element | 4 |
| 03 | KT2222-01 | Lying surface profile, upper leg section, left | 1 |
| 04 | KT2223-01 | Lying surface profile, upper leg section, right | 1 |
| 05 | KT2227 | Supporting profile | 2 |



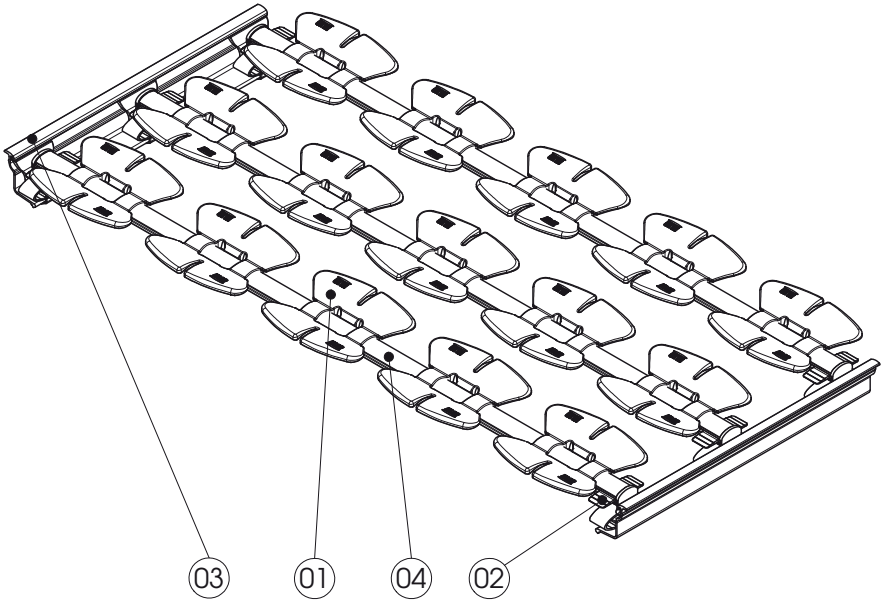
# Lying surface | MiS® lying surface / Lower leg section 1/2

Lower leg section for lying surface 200x90 cm;
BG1215

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 15 |
| 02 | KT2166-02 | Spring element | 6 |
| 03 | KT2182 | Lying surface profile, foot section | 2 |
| 04 | KT2186 | Supporting profile | 3 |

Lower leg section for lying surface 210x90 cm;
BG1217

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 15 |
| 02 | KT2166-02 | Spring element | 6 |
| 03 | KT2184 | Lying surface profile, foot section | 2 |
| 04 | KT2186 | Supporting profile | 3 |



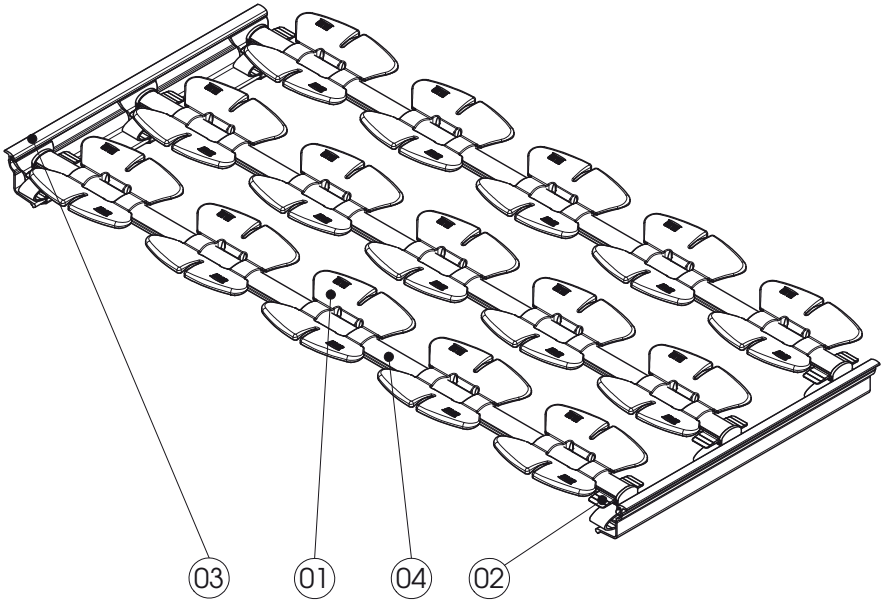
# Lying surface | MiS® lying surface / Lower leg section 2/2

Lower leg section for lying surface 200x100 cm;
BG1272

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 15 |
| 02 | KT2166-02 | Spring element | 6 |
| 03 | KT2182 | Lying surface profile, foot section | 2 |
| 04 | KT2227 | Supporting profile | 3 |

Lower leg section for lying surface 210x100 cm;
BG1274

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT1224 | Wings | 15 |
| 02 | KT2166-02 | Spring element | 6 |
| 03 | KT2184 | Lying surface profile, foot section | 2 |
| 04 | KT2227 | Supporting profile | 3 |



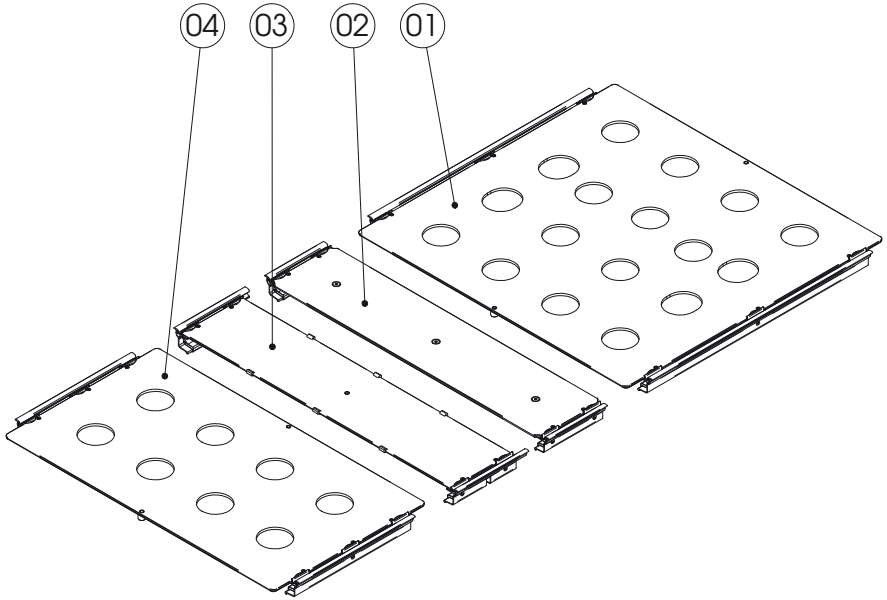
# Lying surface | HPL lying surface (variant)

HPL lying surface for lying surface

| Item | Article | Qty |
|---|---|---|
| 01 | HPL lying surface, back section *(Variants, see below)* | 1 |
| 02 | HPL lying surface, seat section *(Variants, see below)* | 1 |
| 03 | HPL lying surface, upper leg section *(Variants, see below)* | 1 |
| 04 | HPL lying surface, lower leg section *(Variants, see below)* | 1 |

HPL lying surface, variants

| Width | Designation | 200 | 210 |
|---|---|---|---|
| 90 | Complete assembly | BG5097 | BG5054 |
| | Back section | BG5055 | |
| | Seat section | BG5056 | |
| | Upper leg section | BG5057 | |
| | Lower leg section | BG5096 | BG5058 |
| 100 | Complete assembly | BG5267 | BG5266 |
| | Back section | BG5265 | |
| | Seat section | BG5268 | |
| | Upper leg section | BG5270 | |
| | Lower leg section | BG5271 | BG5269 |



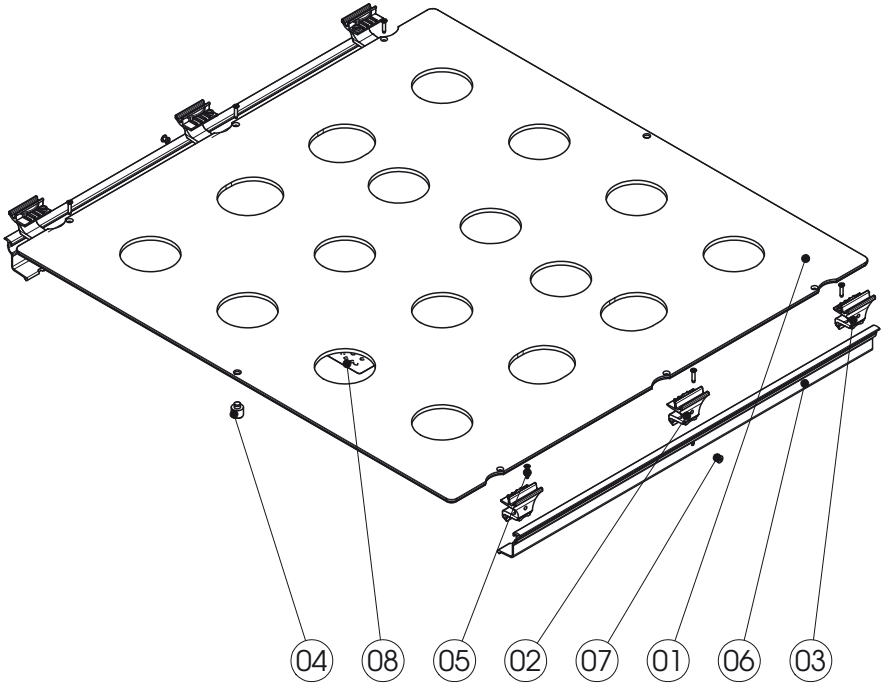
# Lying surface | HPL lying surface (variant) | Back section

Back section for lying surface 200-210x90 cm;
BG5055

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3350 | HPL plate, back section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3230 | Lying surface profile, back section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |

Back section for lying surface 200-210x100 cm;
BG5265

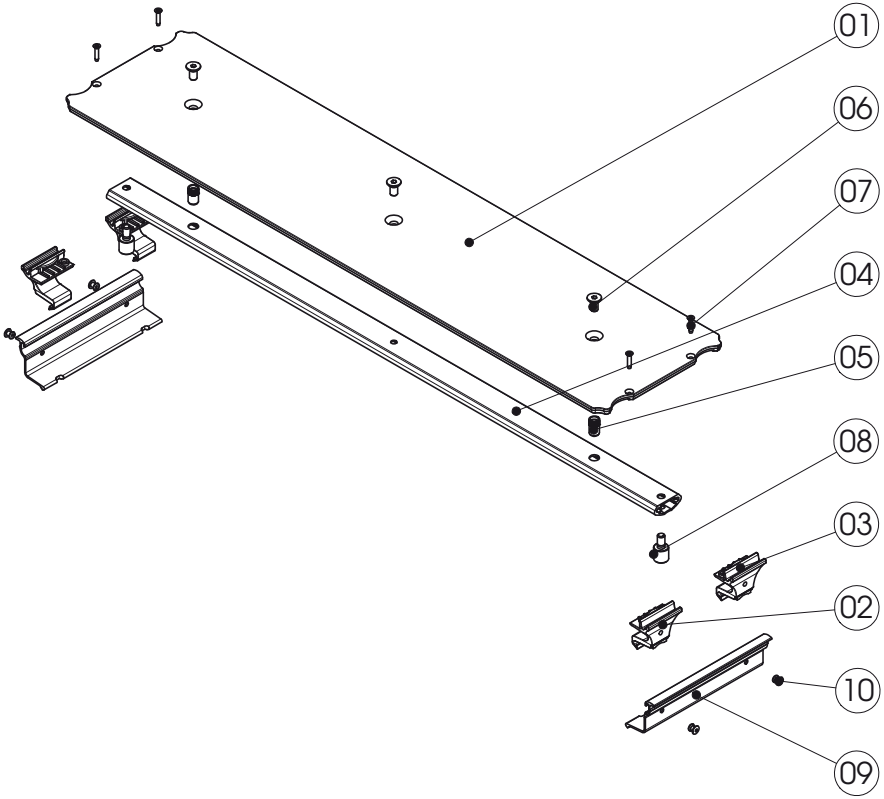
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3231 | HPL plate, back section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3230 | Lying surface profile, back section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |



# Lying surface | HPL lying surface (variant) | Seat section 1/2

Seat section for lying surface 90 cm;
BG5056

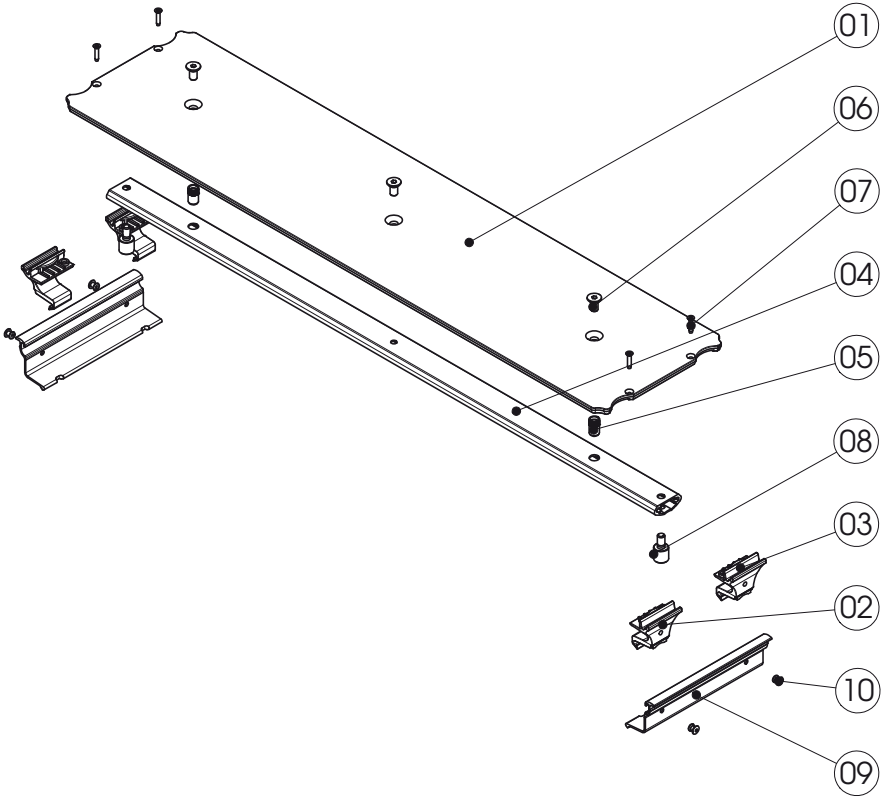
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3349 | HPL plate, seat section | 1 |
| 02 | KT3229 | Support, left | 2 |
| 03 | KT3228 | Support, right | 2 |
| 04 | AP3399 | Reinforcement profile | 1 |
| 05 | SR227 | Blind rivet nut, countersunk head M8x11x17 | 2 |
| 06 | SR644 | Countersunk screw M8x16 A2 ISO 10642 | 3 |
| 07 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 4 |
| 08 | KT3165-02 | Support bolt | 2 |
| 09 | KT3231 | Lying surface profile, seat section | 2 |
| 10 | SR2161 | Blind rivet, flat head Ø4.8x12 | 4 |



# Lying surface | HPL lying surface (variant) | Seat section 2/2

Seat section for lying surface 100 cm;
BG5268

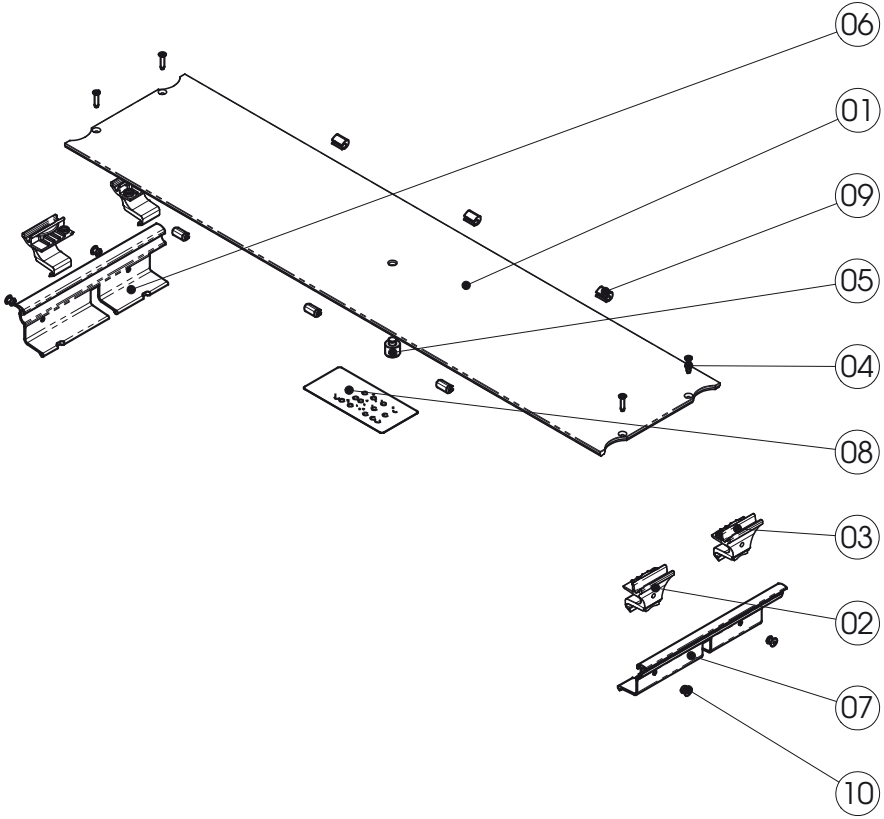
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3371 | HPL plate, seat section | 1 |
| 02 | KT3229 | Support, left | 2 |
| 03 | KT3228 | Support, right | 2 |
| 04 | AP3400 | Reinforcement profile | 1 |
| 05 | SR227 | Blind rivet nut, countersunk head M8x11x17 | 2 |
| 06 | SR644 | Countersunk screw M8x16 A2 ISO 10642 | 3 |
| 07 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 4 |
| 08 | KT3165-02 | Support bolt | 2 |
| 09 | KT3231 | Lying surface profile, seat section | 2 |
| 10 | SR2161 | Blind rivet, flat head Ø4.8x12 | 4 |



# Lying surface | HPL lying surface (variant) | Upper leg section 1/2

Upper leg section for lying surface 90 cm;
BG5057

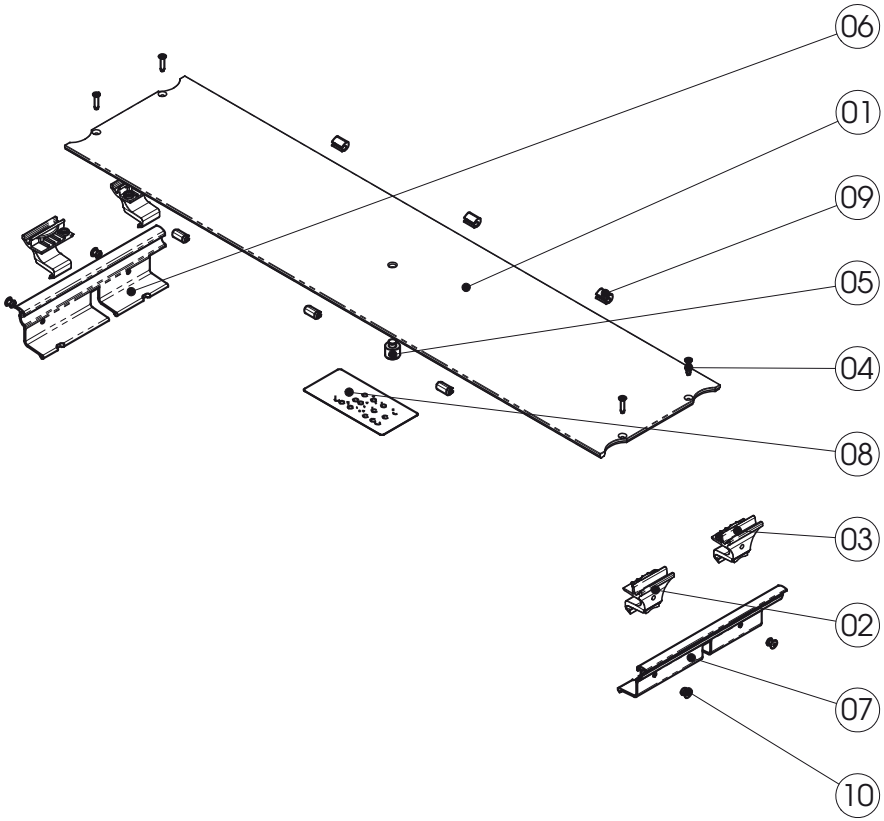
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3348 | HPL plate, upper leg section | 1 |
| 02 | KT3229 | Support, left | 2 |
| 03 | KT3228 | Support, right | 2 |
| 04 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 4 |
| 05 | KT345 | Support bolt | 1 |
| 06 | KT3234 | Lying surface profile, upper leg section, left | 1 |
| 07 | KT3233 | Lying surface profile, upper leg section, right | 1 |
| 08 | T009 | Adhesive label | 1 |
| 09 | KT1197 | Clip | 6 |
| 10 | SR2161 | Blind rivet, flat head Ø4.8x12 | 4 |



# Lying surface | HPL lying surface (variant) | Upper leg section 2/2

Upper leg section for lying surface 100 cm;
BG5270

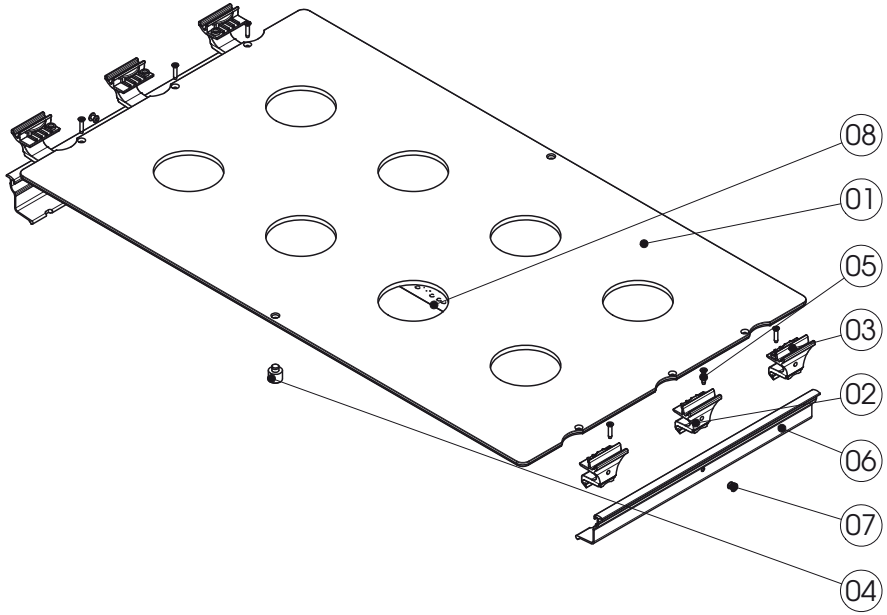
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3373 | HPL plate, upper leg section | 1 |
| 02 | KT3229 | Support, left | 2 |
| 03 | KT3228 | Support, right | 2 |
| 04 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 4 |
| 05 | KT345 | Support bolt | 1 |
| 06 | KT3234 | Lying surface profile, upper leg section, left | 1 |
| 07 | KT3233 | Lying surface profile, upper leg section, right | 1 |
| 08 | T009 | Adhesive label | 1 |
| 09 | KT1197 | Clip | 6 |
| 10 | SR2161 | Blind rivet, flat head Ø4.8x12 | 4 |



# Lying surface | HPL lying surface (variant) / Lower leg section 1/4

Lower leg section for lying surface 200x90 cm;
BG5096

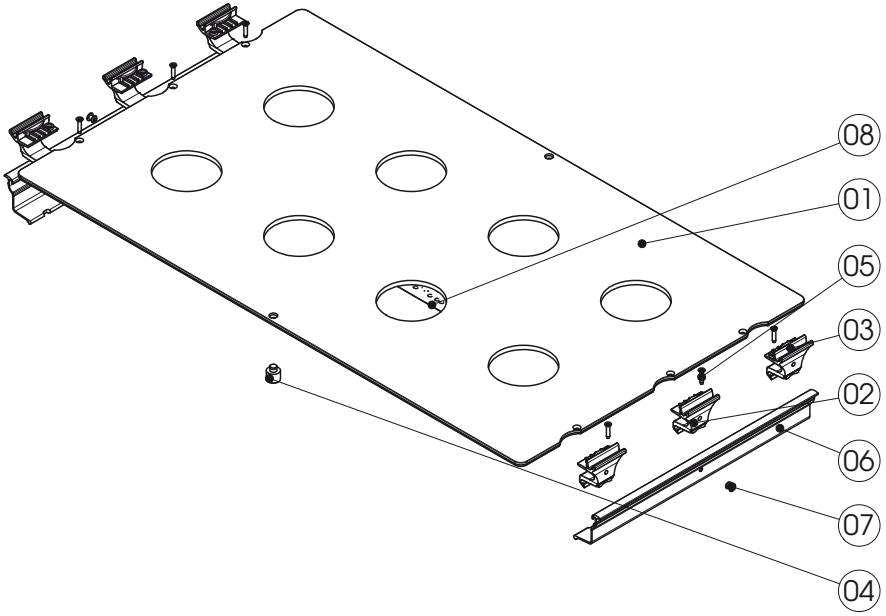
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3369 | HPL plate, lower leg section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3245 | Lying surface profile, lower leg section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |



# Lying surface | HPL lying surface (variant) / Lower leg section 2/4

Lower leg section for lying surface 200x100 cm;
BG5271

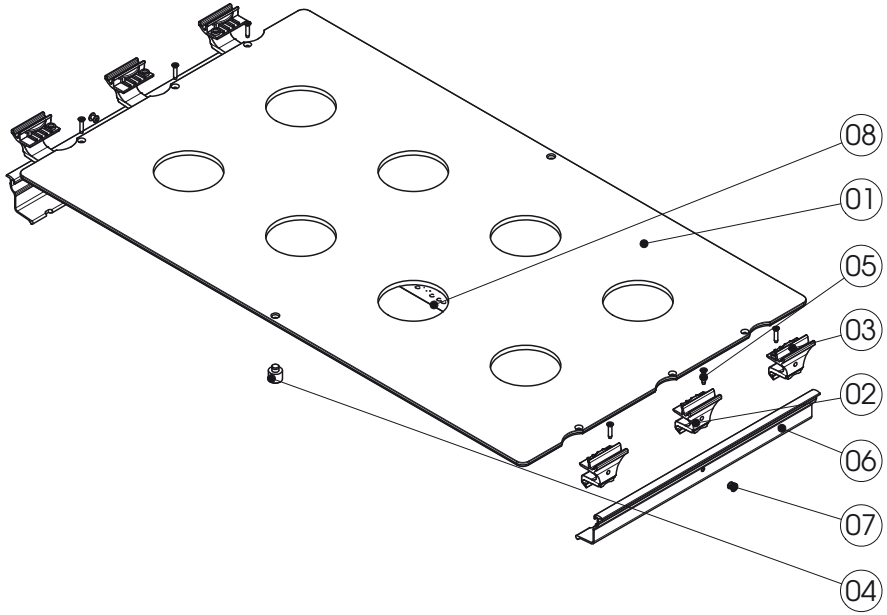
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3372 | HPL plate, lower leg section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3245 | Lying surface profile, lower leg section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |



# Lying surface | HPL lying surface (variant) / Lower leg section 3/4

Lower leg section for lying surface 210x90 cm;
BG5058

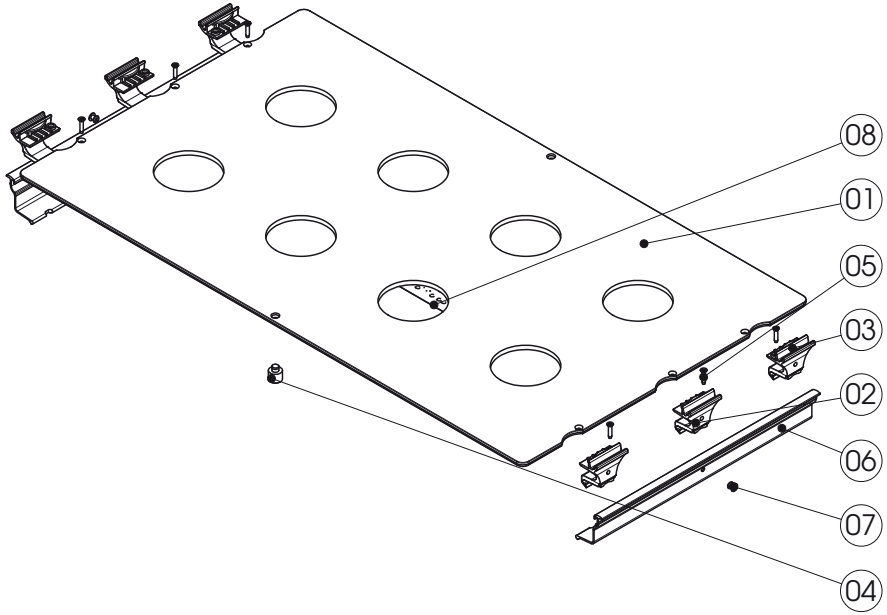
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3347 | HPL plate, lower leg section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3232 | Lying surface profile, lower leg section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |



# Lying surface | HPL lying surface (variant) / Lower leg section 4/4

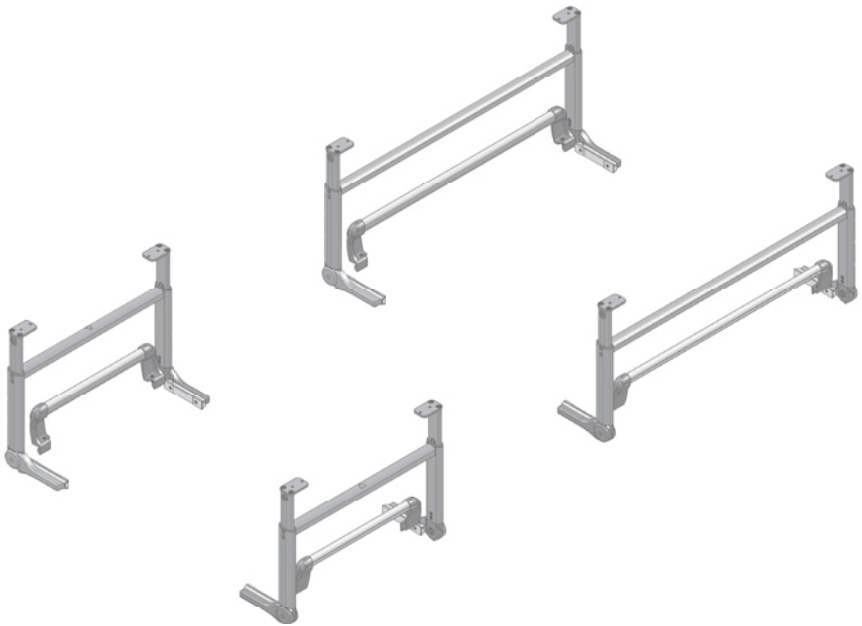
Lower leg section for lying surface 210x100 cm;
BG5269

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | HPL3374 | HPL plate, lower leg section | 1 |
| 02 | KT3229 | Support, left | 3 |
| 03 | KT3228 | Support, right | 3 |
| 04 | KT345 | Support bolt | 2 |
| 05 | SR2660 | Self-tapping screw 3.9x19 A2 DIN 7982, Form F | 6 |
| 06 | KT3232 | Lying surface profile, lower leg section | 2 |
| 07 | SR2161 | Blind rivet, flat head Ø4.8x12 | 2 |
| 08 | T009 | Adhesive label | 1 |



# Side rails

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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- Clamp 🕮 113

# Side rails | Side rail set (standard, 34 cm)

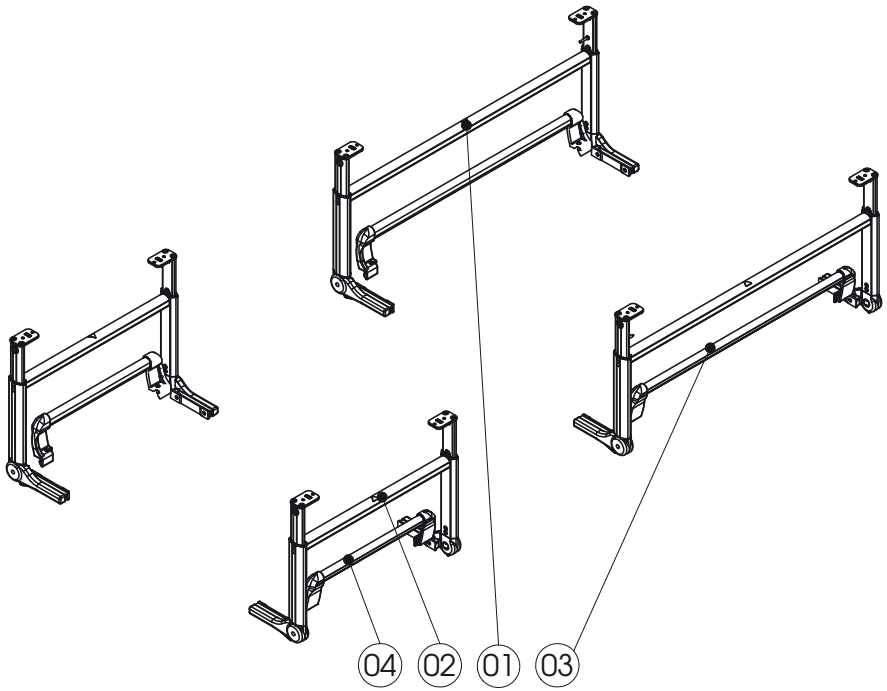
**The side rails for the model S 582 are available in three heights: 34 cm (standard), 37 cm and 40 cm.**

Side rail set (standard, 34 cm)
for lying surface 200 cm;
BG3039-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG2970-02 | Side rails, back section | 2 |
| 02 | BG2975-02 | Side rails, lower leg section | 2 |
| 03 | BG3034-01 | Mattress holder, back section | 2 |
| 04 | BG3036-01 | Mattress holder, lower leg section | 2 |

Side rail set (standard, 34 cm)
for lying surface 210 cm;
BG3040-01

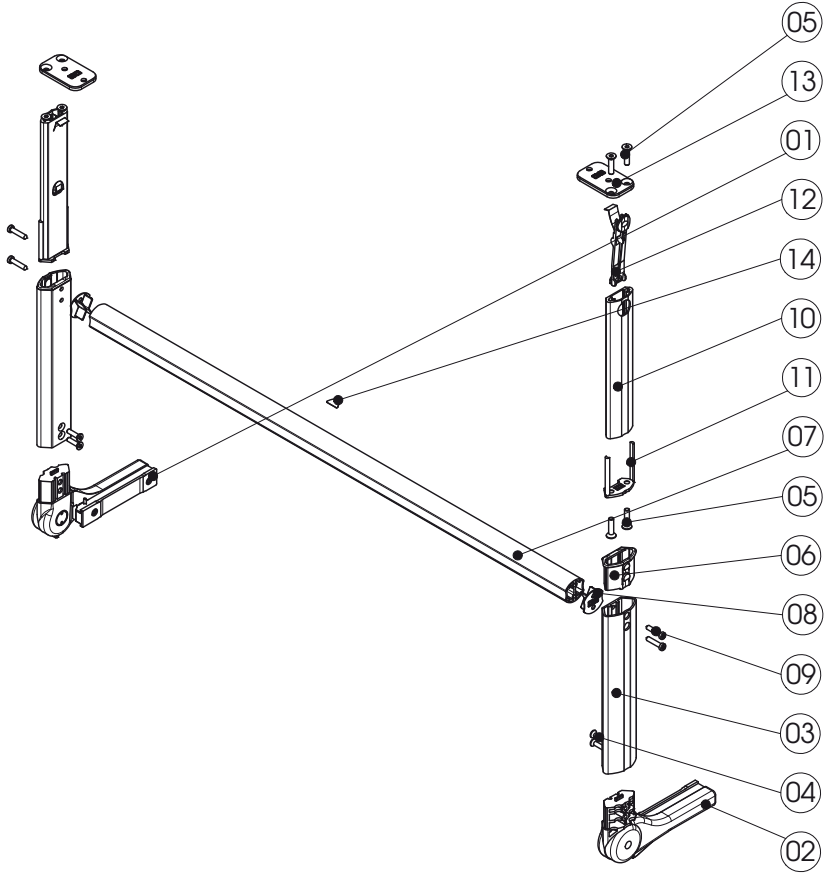
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG2970-02 | Side rails, back section | 2 |
| 02 | BG2976-02 | Side rails, lower leg section | 2 |
| 03 | BG3034-01 | Mattress holder, back section | 2 |
| 04 | BG3037-01 | Mattress holder, lower leg section | 2 |



# Side rails | Side rail set (standard, 34 cm) | Back section

Side rails, back section (standard, 34 cm)
for lying surface 200-210 cm;
BG2970-02

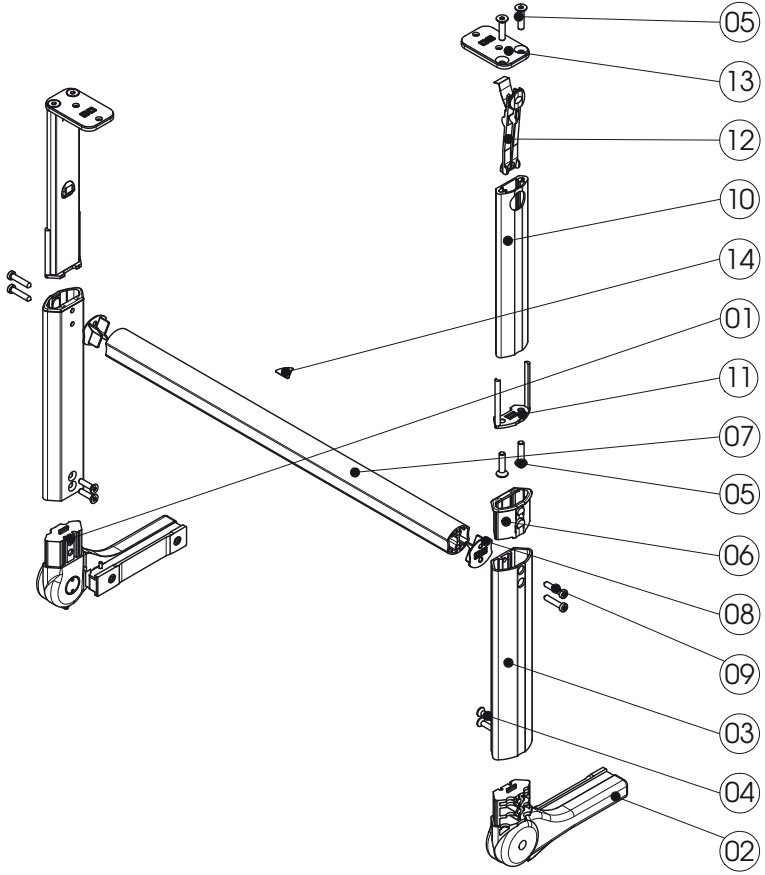
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3005 | Outer longitudinal profile | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 06 | KT1193-01 | Guide, upper | 2 |
| 07 | AP3001 | Cross profile, back section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3006 | Inner longitudinal profile | 2 |
| 11 | KT2736-01 | Guide, lower | 2 |
| 12 | BG3136 | Release with slide-in spring | 2 |
| 13 | KT2442-03 | Hand rail plate | 2 |
| 14 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (standard, 34 cm) | Lower leg section 1/2

Side rails, lower leg section (standard, 34 cm)
for lying surface 200 cm;
BG2975-02

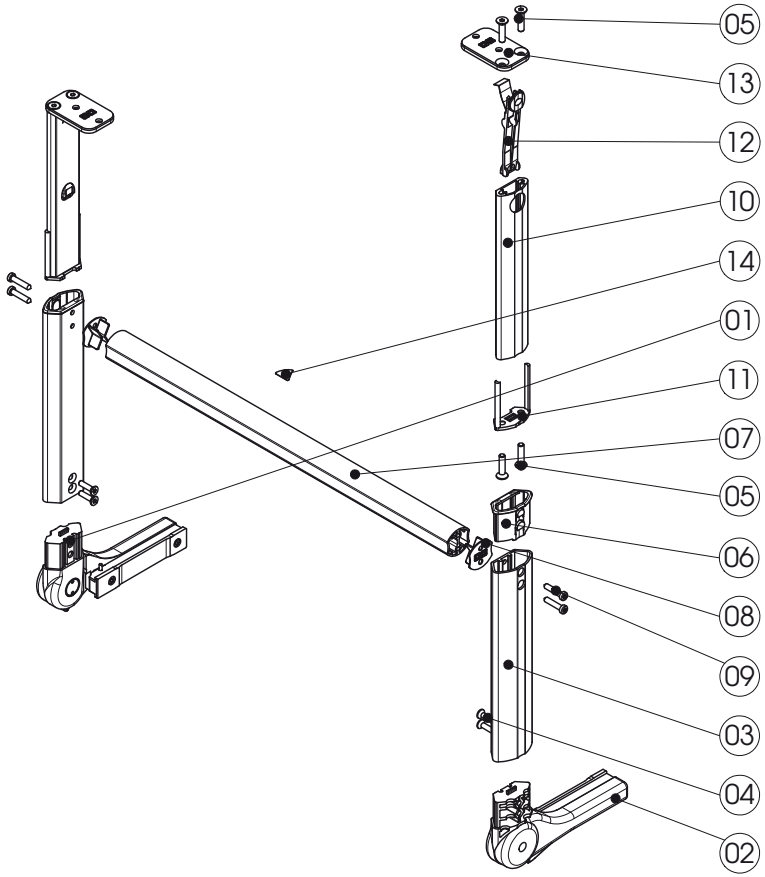
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3005 | Outer longitudinal profile | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 06 | KT1193-01 | Guide, upper | 2 |
| 07 | AP3003 | Cross profile, lower leg section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3006 | Inner longitudinal profile | 2 |
| 11 | KT2736-01 | Guide, lower | 2 |
| 12 | BG3136 | Release with slide-in spring | 2 |
| 13 | KT2442-03 | Hand rail plate | 2 |
| 14 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (standard, 34 cm) | Lower leg section 2/2

Side rails, lower leg section (standard, 34 cm)
for lying surface 210 cm;
BG2976-02

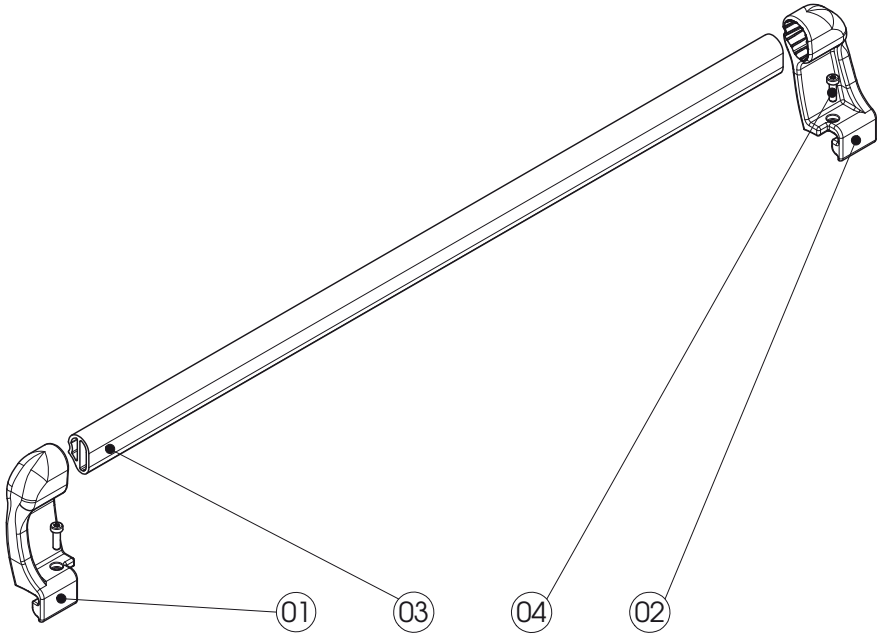
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3005 | Outer longitudinal profile | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 06 | KT1193-01 | Guide, upper | 2 |
| 07 | AP3004 | Cross profile, lower leg section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3006 | Inner longitudinal profile | 2 |
| 11 | KT2736-01 | Guide, lower | 2 |
| 12 | BG3136 | Release with slide-in spring | 2 |
| 13 | KT2442-03 | Hand rail plate | 2 |
| 14 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (standard, 34 cm) | Mattress holder, back section

Mattress holder, back section (standard, 34 cm)
for lying surface 200-210 cm;
BG3034-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2996 | Railing, back section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16<br>DIN 7500, self-tapping, low head,<br>Torx, galvanized | 2 |

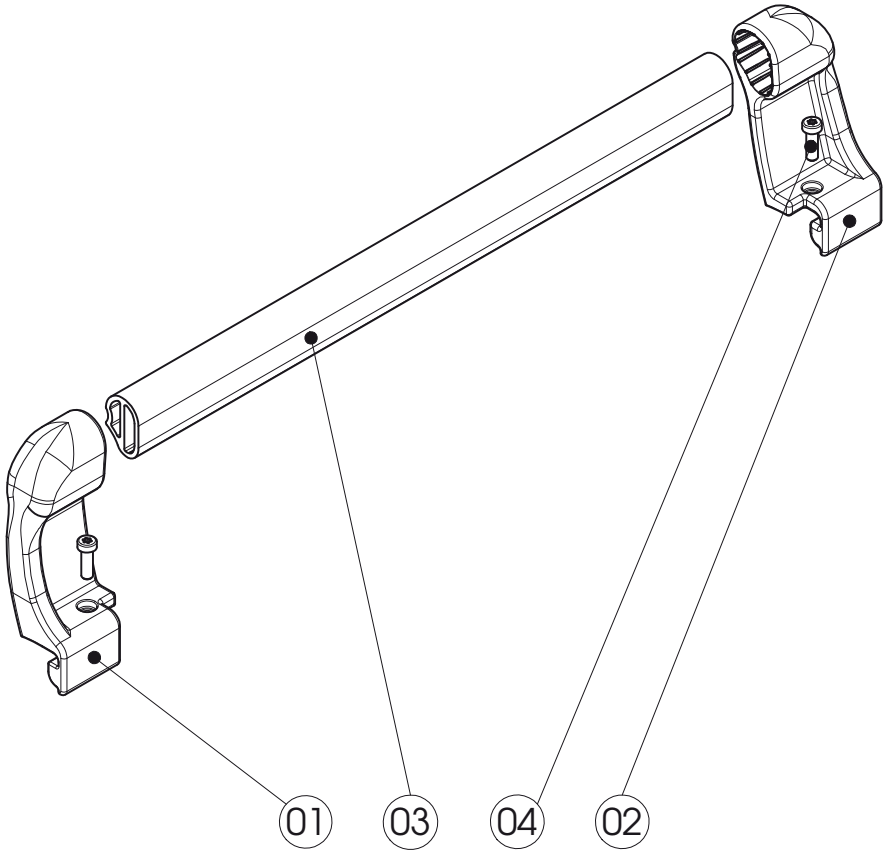


Mattress holder, lower leg section (standard, 34 cm)
for lying surface 200 cm;
BG3036-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2998 | Railing, lower leg section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |

Mattress holder, lower leg section (standard, 34 cm)
for lying surface 210 cm;
BG3037-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2999 | Railing, lower leg section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |



# Side rails | Side rail set (raised, 37 cm)

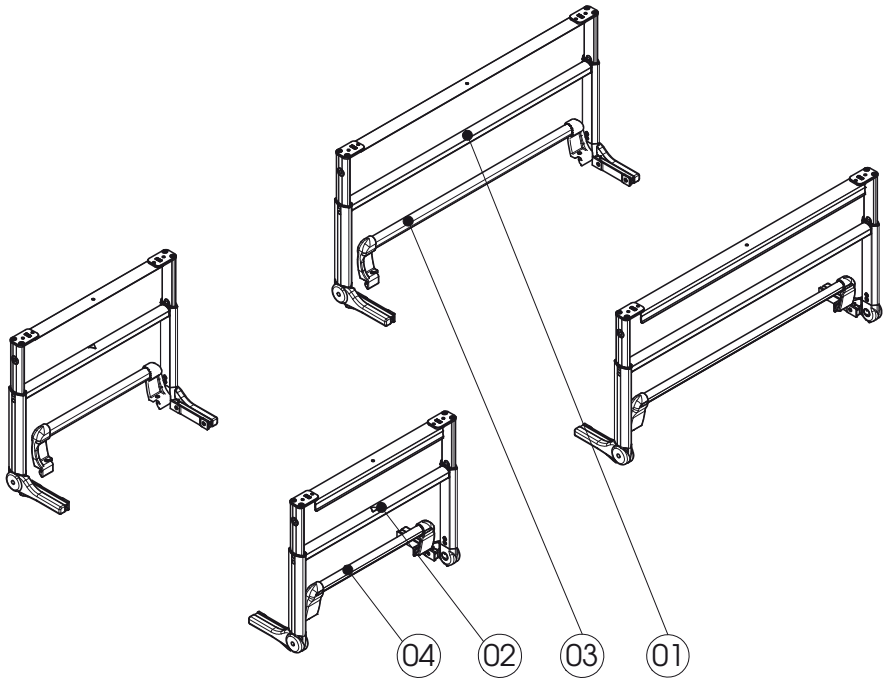
**The side rails for the model S 582 are available in three heights: 34 cm (standard), 37 cm and 40 cm (raised).**

Side rail set (raised, 37 cm)
for lying surface 200 cm;
BG4060

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4055 | Raised side rails, back section | 2 |
| 02 | BG4057 | Raised side rails, lower leg section | 2 |
| 03 | BG3034-01 | Raised mattress holder, back section | 2 |
| 04 | BG3036-01 | Raised mattress holder, lower leg section | 2 |

Side rail set (raised, 37 cm)
for lying surface 210 cm;
BG4061

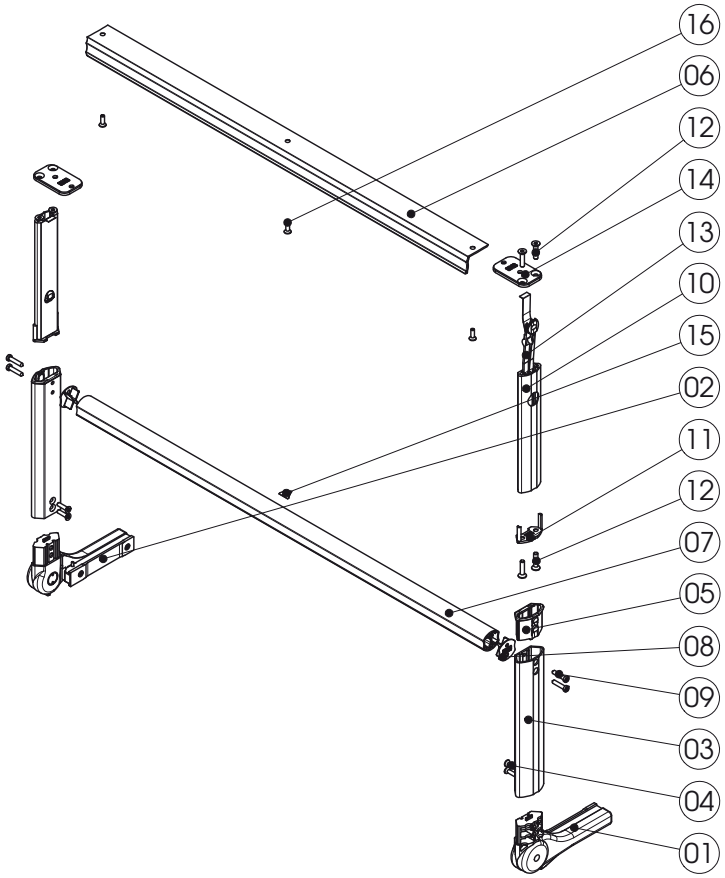
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4055 | Raised side rails, back section | 2 |
| 02 | BG4058 | Raised side rails, lower leg section | 2 |
| 03 | BG3034-01 | Raised mattress holder, back section | 2 |
| 04 | BG3037-01 | Raised mattress holder, lower leg section | 2 |



# Side rails | Side rail set (raised, 37 cm) | Back section

Side rail set (raised, 37 cm)
for lying surface 200-210 cm;
BG4055

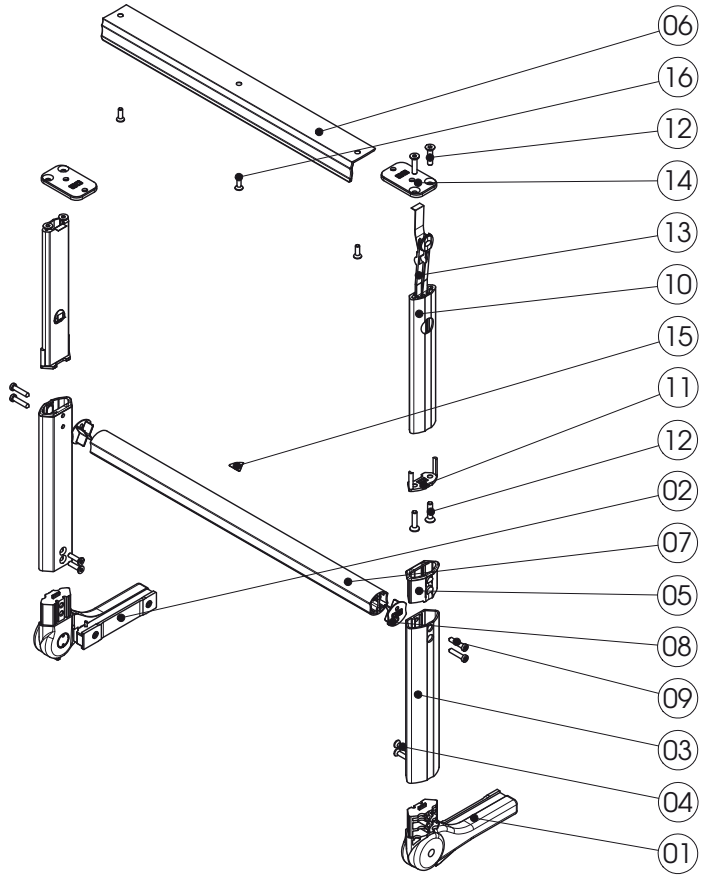
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1211 | Side rail joint, right | 1 |
| 02 | BG1212 | Side rail joint, left | 1 |
| 03 | AP3005 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Form M, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3454-01 | Side rail screen, back section | 1 |
| 07 | AP3001 | Cross profile, back section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3451 | Inner longitudinal profile | 2 |
| 11 | KT3019 | Guide, lower | 2 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 13 | BG4025 | Release with slide-in spring | 2 |
| 14 | KT2442-03 | Hand rail plate | 2 |
| 15 | T2007 | Warning sign | 1 |
| 16 | SR2332 | Countersunk screw M5x16, self-tapping, Form N, Torx | 1 |



# Side rails | Side rail set (raised, 37 cm) | Lower leg section 1/2

Side rail set, lower leg section (raised, 37 cm)
for lying surface 200 cm;
BG4057

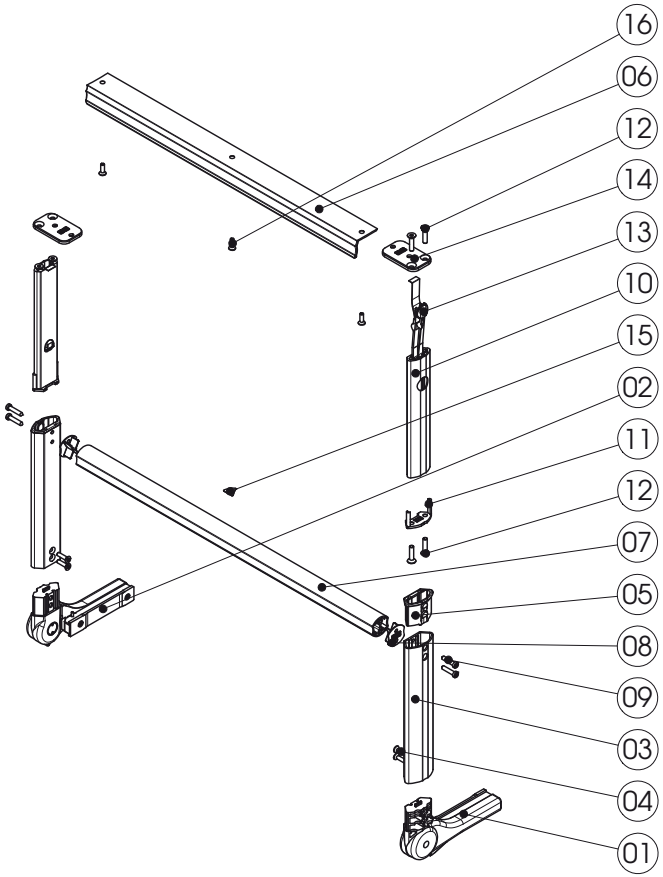
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1211 | Side rail joint, right | 1 |
| 02 | BG1212 | Side rail joint, left | 1 |
| 03 | AP3005 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Form M, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3464 | Side rail screen, lower leg section | 1 |
| 07 | AP3003 | Cross profile, lower leg section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3451 | Inner longitudinal profile | 2 |
| 11 | KT3019 | Guide, lower | 2 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 13 | BG4025 | Release with slide-in spring | 2 |
| 14 | KT2442-03 | Hand rail plate | 2 |
| 15 | T2007 | Warning sign | 1 |
| 16 | SR2332 | Countersunk screw M5x16, self-tapping, Form N, Torx | 1 |



# Side rails | Side rail set (raised, 37 cm) | Lower leg section 2/2

Side rail set, lower leg section (raised, 37 cm)
for lying surface 210 cm;
BG4058

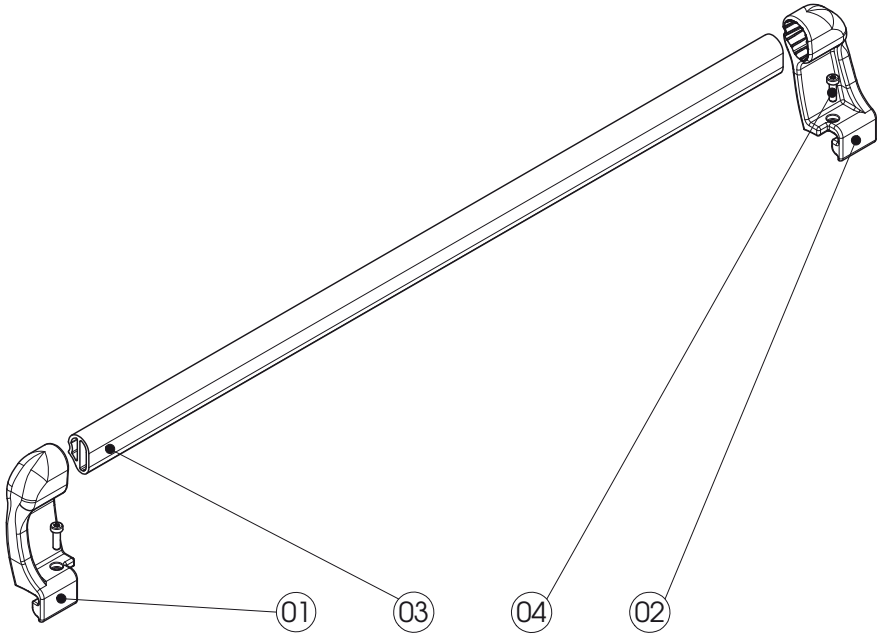
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1211 | Side rail joint, right | 1 |
| 02 | BG1212 | Side rail joint, left | 1 |
| 03 | AP3005 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Form M, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3465 | Side rail screen, lower leg section | 1 |
| 07 | AP3004 | Cross profile, lower leg section | 1 |
| 08 | KT2737-01 | Cross profile form disk | 2 |
| 09 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 10 | AP3451 | Inner longitudinal profile | 2 |
| 11 | KT3019 | Guide, lower | 2 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 8 |
| 13 | BG4025 | Release with slide-in spring | 2 |
| 14 | KT2442-03 | Hand rail plate | 2 |
| 15 | T2007 | Warning sign | 1 |
| 16 | SR2332 | Countersunk screw M5x16, Form N, Torx | 1 |



# Side rails | Side rail set (raised, 37 cm) | Mattress holder, back section

Mattress holder, back section (raised, 37 cm)
for lying surface 200-210 cm;
BG3034-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2996 | Railing, back section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |

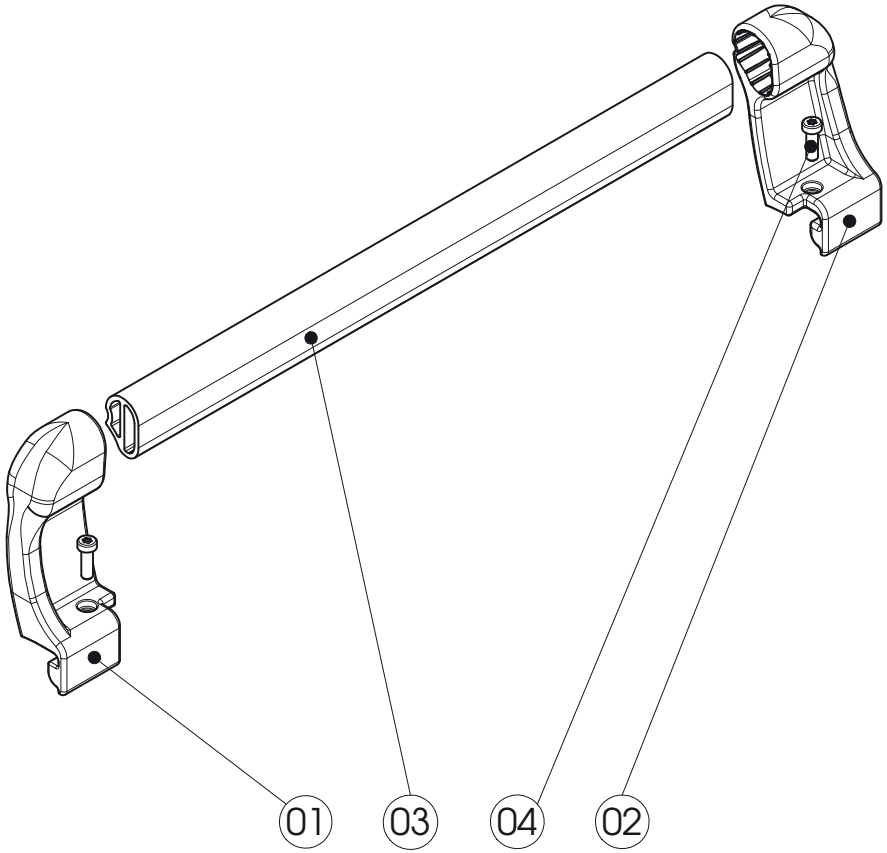


Mattress holder, lower leg section (raised, 37 cm)
for lying surface 200 cm;
BG3036-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2998 | Railing, lower leg section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |

Mattress holder, lower leg section (raised, 37 cm)
for lying surface 210 cm;
BG3037-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2611-01 | Mattress holder, right | 1 |
| 02 | KT2612-01 | Mattress holder, left | 1 |
| 03 | AP2999 | Railing, lower leg section | 1 |
| 04 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |



# Side rails | Side rail set (raised, 40 cm)

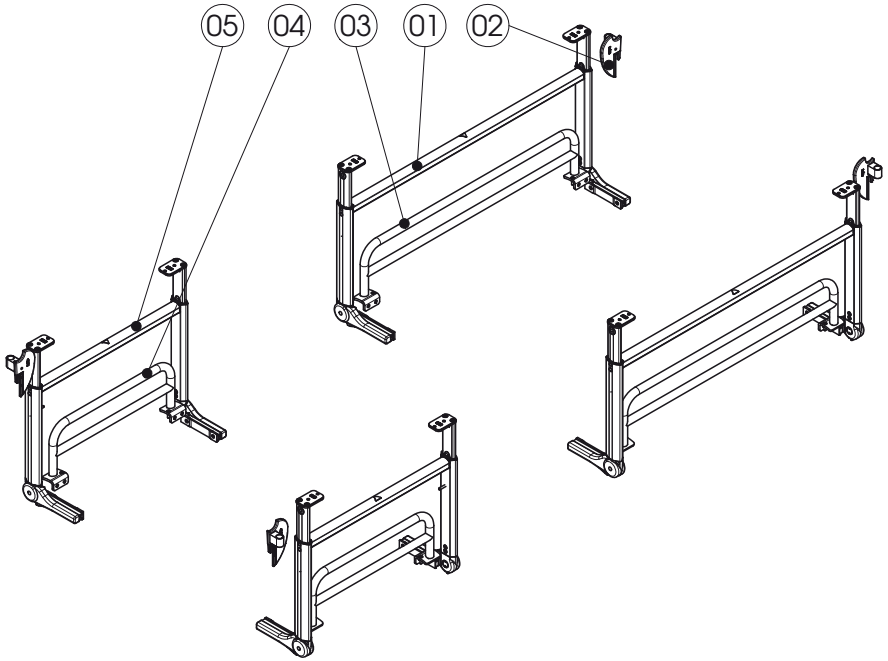
**The side rails for the model S 582 are available in three heights: 34 cm (standard), 37 cm and 40 cm (raised).**

Side rail set (raised, 40 cm)
for lying surface 200 cm;
BG3125

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG3106 | Raised side rails, back section | 1 |
| 02 | BG1912-01 | Clamp, raised side rails | 1 |
| 03 | BG3142 | Raised mattress holder, back section | 1 |
| 04 | BG3145 | Raised mattress holder, lower leg section | 1 |
| 05 | BG3109 | Raised side rails, lower leg section | 1 |

Side rail set (raised, 40 cm)
for lying surface 210 cm;
BG3126

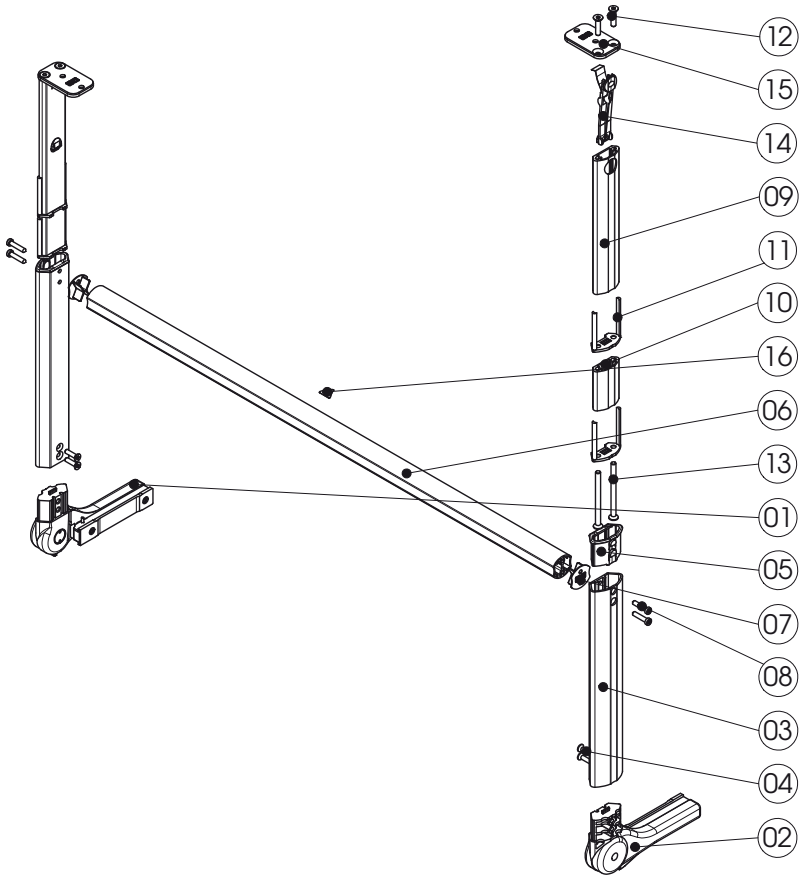
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG3106 | Raised side rails, back section | 1 |
| 02 | BG1912-01 | Clamp, raised side rails | 1 |
| 03 | BG3142 | Raised mattress holder, back section | 1 |
| 04 | BG3144 | Raised mattress holder, lower leg section | 1 |
| 05 | BG3108 | Raised side rails, lower leg section | 1 |



# Side rails | Side rail set (raised, 40 cm) | Back section

Side rail set (raised, 40 cm)
for lying surface 200-210 cm;
BG3106-02

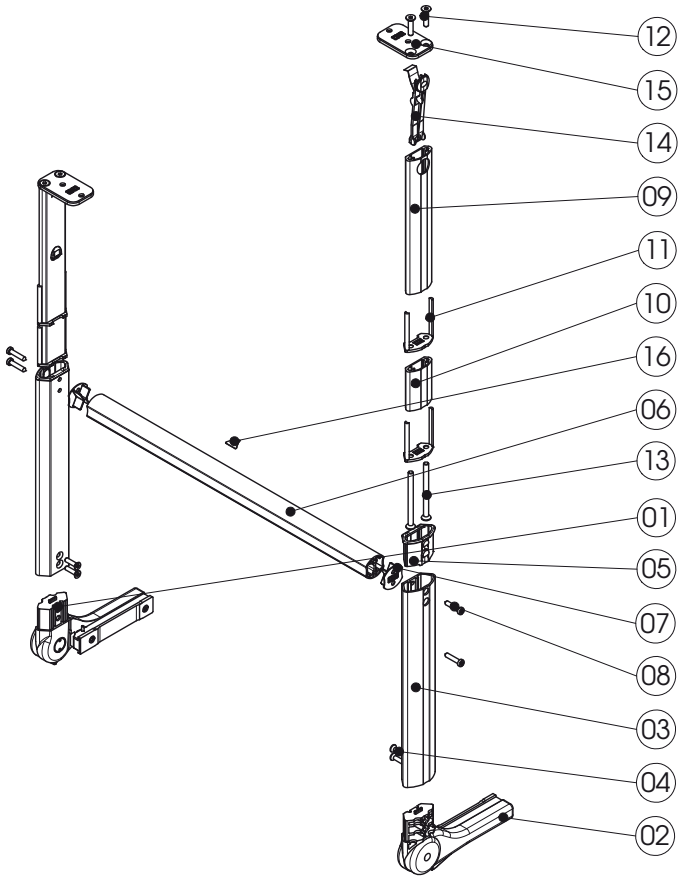
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3069 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3001 | Cross profile, back section | 1 |
| 07 | KT2737-01 | Cross profile form disk | 2 |
| 08 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 09 | AP3006 | Inner longitudinal profile | 2 |
| 10 | AP705 | Side rail raising | 2 |
| 11 | KT2736-01 | Guide, lower | 4 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 13 | SR542 | Countersunk screw M6x80 ISO 10642 8.8, hexagonal, galvanized | 4 |
| 14 | BG3136 | Release with slide-in spring | 2 |
| 15 | KT2442-03 | Hand rail plate | 2 |
| 16 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (raised, 40 cm) | Lower leg section 1/2

Side rail set, lower leg section (raised, 40 cm)
for lying surface 200 cm;
BG3108-02

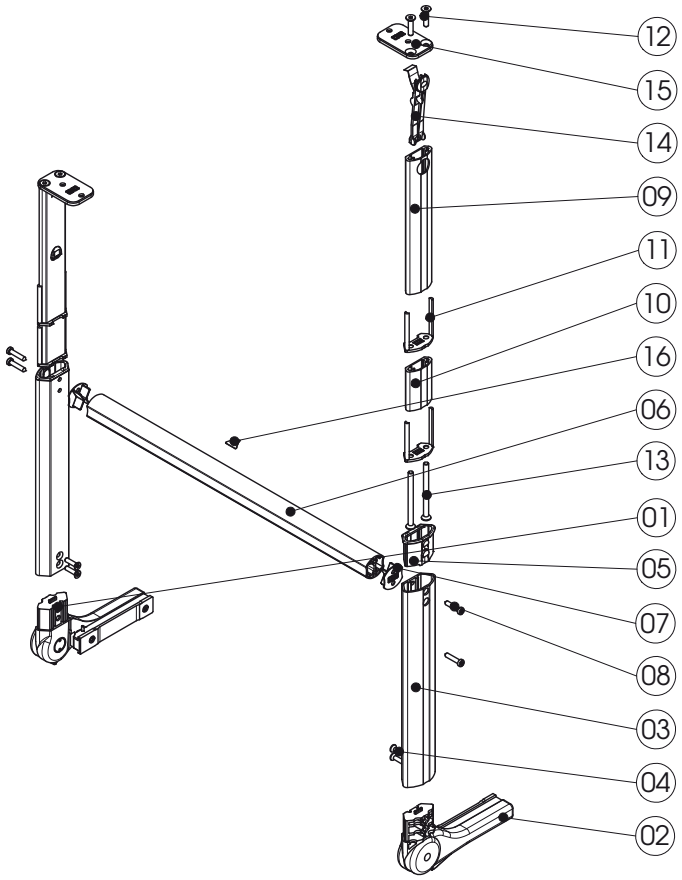
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3069 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3003 | Cross profile, lower leg section | 1 |
| 07 | KT2737-01 | Cross profile form disk | 2 |
| 08 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 09 | AP3006 | Inner longitudinal profile | 2 |
| 10 | AP705 | Side rail raising | 2 |
| 11 | KT2736-01 | Guide, lower | 4 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 13 | SR542 | Countersunk screw M6x80 ISO 10642 8.8, hexagonal, galvanized | 4 |
| 14 | BG3136 | Release with slide-in spring | 2 |
| 15 | KT2442-03 | Hand rail plate | 2 |
| 16 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (raised, 40 cm) | Lower leg section 2/2

Side rail set, lower leg section (raised, 40 cm)
for lying surface 210 cm;
BG3109-02

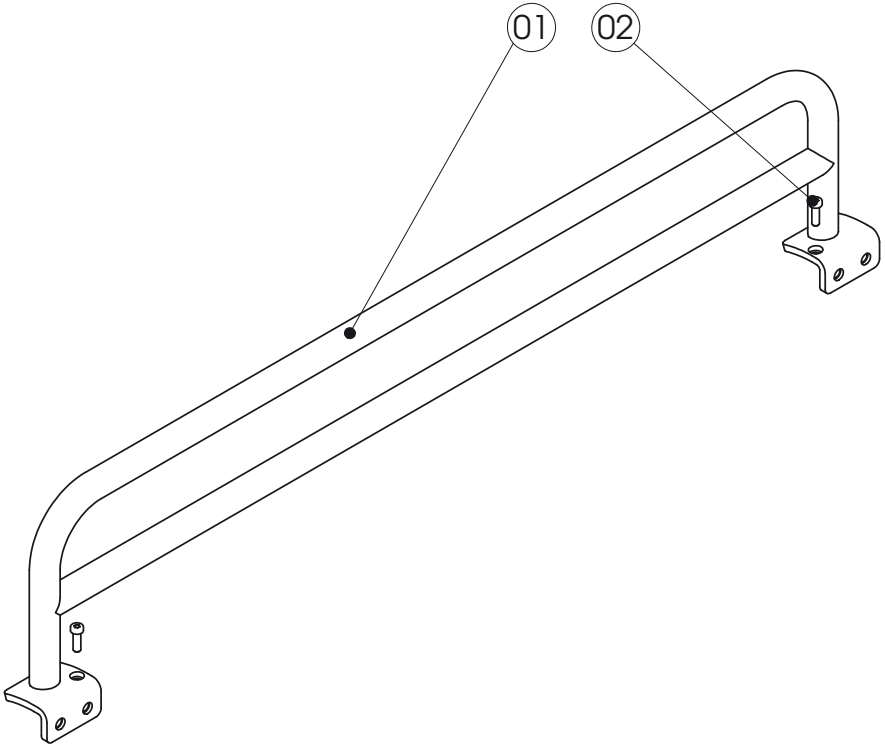
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG1212 | Side rail joint, left | 1 |
| 02 | BG1211 | Side rail joint, right | 1 |
| 03 | AP3069 | Outer longitudinal profile, raised | 2 |
| 04 | SR257 | Countersunk screw M5x20, self-tapping, GEOMET® coated, Torx | 4 |
| 05 | KT1193-01 | Guide, upper | 2 |
| 06 | AP3004 | Cross profile, lower leg section | 1 |
| 07 | KT2737-01 | Cross profile form disk | 2 |
| 08 | SR2386 | Cheese-head screw, special head 4.8x25, Torx, galvanized | 4 |
| 09 | AP3006 | Inner longitudinal profile | 2 |
| 10 | AP705 | Side rail raising | 2 |
| 11 | KT2736-01 | Guide, lower | 4 |
| 12 | SR751 | Countersunk screw M6x20 DIN 7500, self-tapping, Torx, Form M, galvanized | 4 |
| 13 | SR542 | Countersunk screw M6x80 ISO 10642 8.8, hexagonal, galvanized | 4 |
| 14 | BG3136 | Release with slide-in spring | 2 |
| 15 | KT2442-03 | Hand rail plate | 2 |
| 16 | T2007 | Warning sign | 1 |



# Side rails | Side rail set (raised, 40 cm) | Mattress holder, back section

Mattress holder, back section (raised, 40 cm)
for lying surface 200-210 cm;
BG3142-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3013-02 | Mattress holder, back section | 1 |
| 02 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |

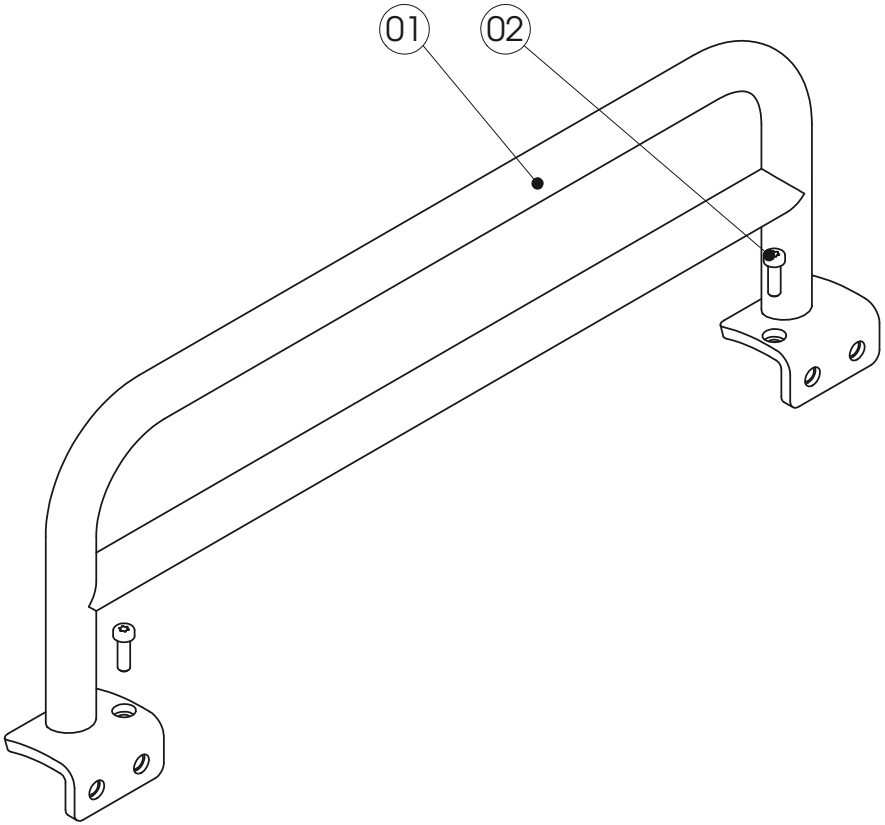


Mattress holder, lower leg section (raised, 40 cm)
for lying surface 200 cm;
BG3144-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3015-02 | Mattress holder, lower leg section | 1 |
| 02 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |

Mattress holder, lower leg section (raised, 40 cm)
for lying surface 210 cm;
BG3145-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3016-02 | Mattress holder, lower leg section | 1 |
| 02 | SR2207 | Cheese-head screw M5x16 DIN 7500, self-tapping, low head, Torx, galvanized | 2 |



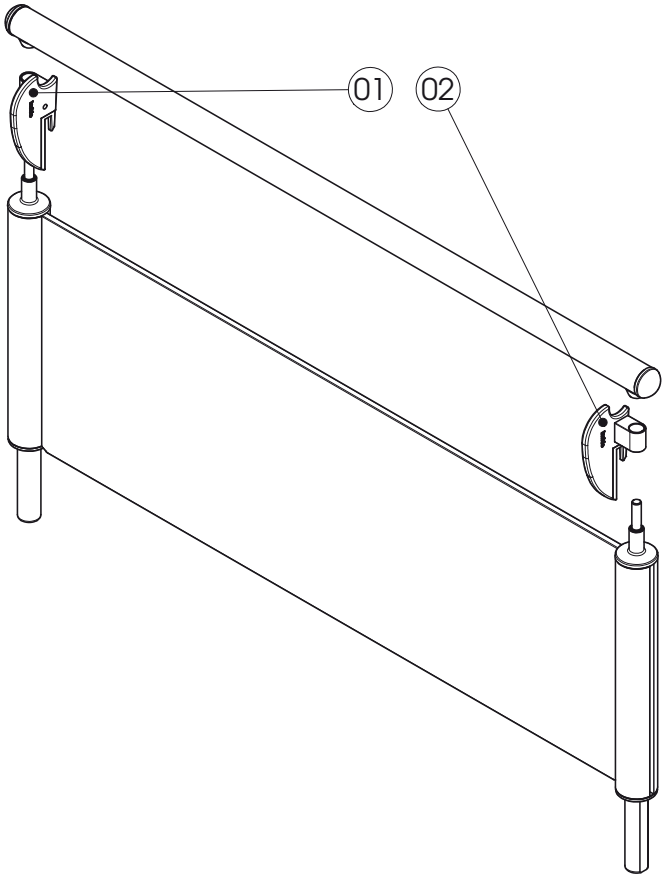
# Side rails | Side rail set (raised, 40 cm) | Clamp

Clamp (raised, 40 cm);
BG1912-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2497 | Clamp, right, raised side rails | 2 |
| 02 | KT2498 | Clamp, left, raised side rails | 2 |

*Clamp (raised, 40 cm), Service;*
*BG2308*

| *Art. no.* | *Article* | *Qty* |
|---|---|---|
| *KT2570* | *Clamp, right, raised side rails* | *2* |
| *KT2571* | *Clamp, left, raised side rails* | *2* |
| *F2704* | *Clamp bracket* | *4* |
| *SR2335* | *Flat-headed screw* | *4* |
| *SR2334* | *cap nut* | *4* |



# Bumper set

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.

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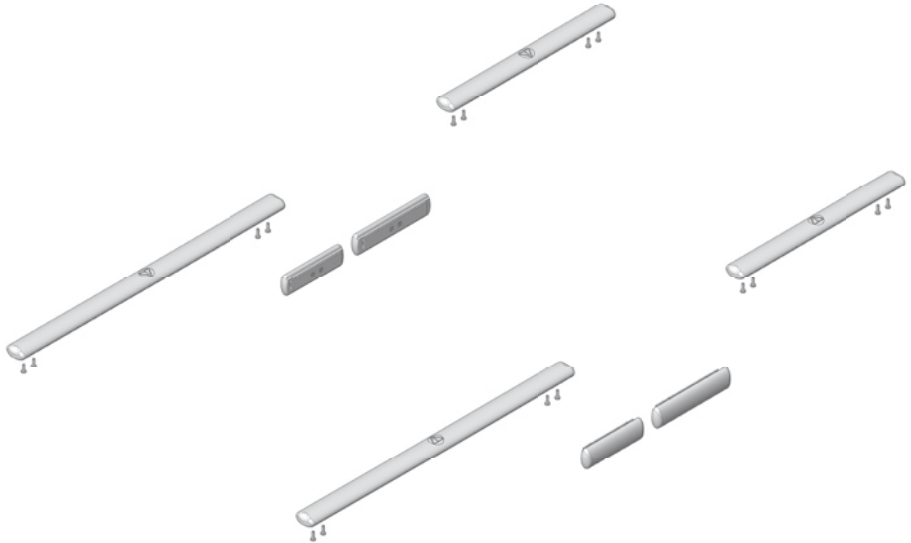
Bumper set 📖 115
Bumper set 📖 116



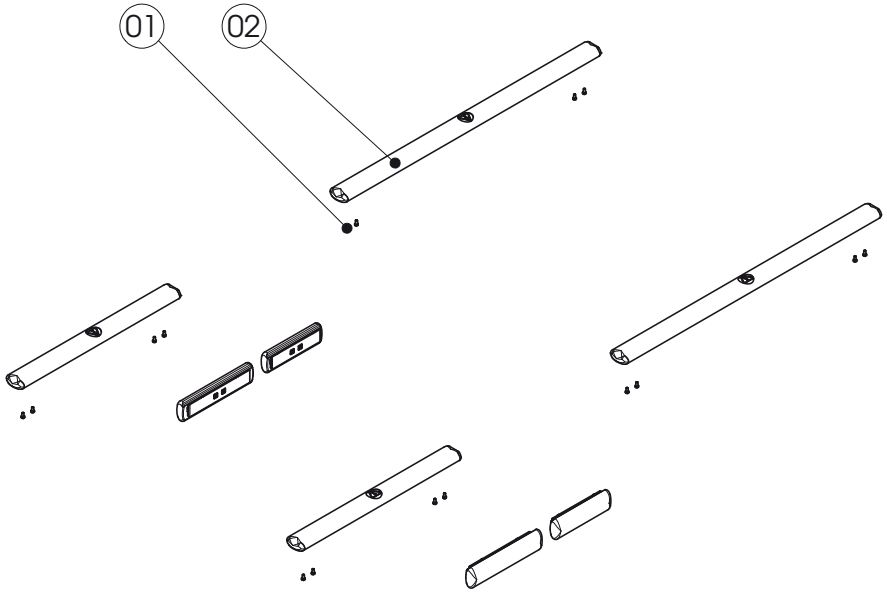
# Bumper set | Bumper set

Bumper set for lying surface 200 cm;
BG1528

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | SR2209 | Cheese-head screw M5x10 | 16 |
| 02 | BG3438 | Bumper set | 1 |

Bumper set for lying surface 210 cm;
BG1988

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | SR2209 | Cheese-head screw M5x10 | 16 |
| 02 | BG3439 | Bumper set | 1 |



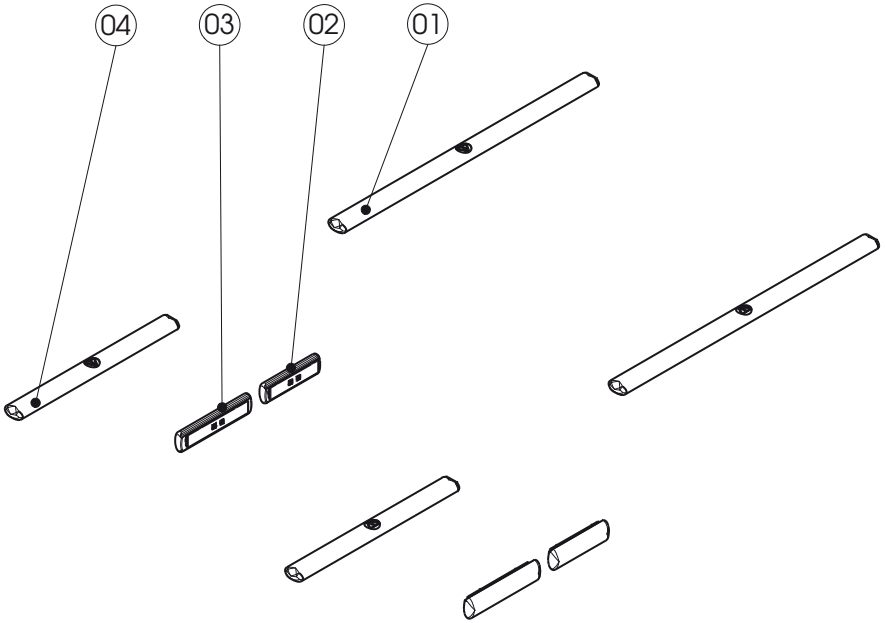
# Bumper set | Bumper set | Bumper set

Bumper set for lying surface 200 cm;
BG3438

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F568 | Bumper set, back section | 2 |
| 02 | KT241-01 | Bumper set, seat section | 2 |
| 03 | KT239-01 | Bumper set, upper leg section | 2 |
| 04 | F567 | Bumper set, lower leg section | 2 |

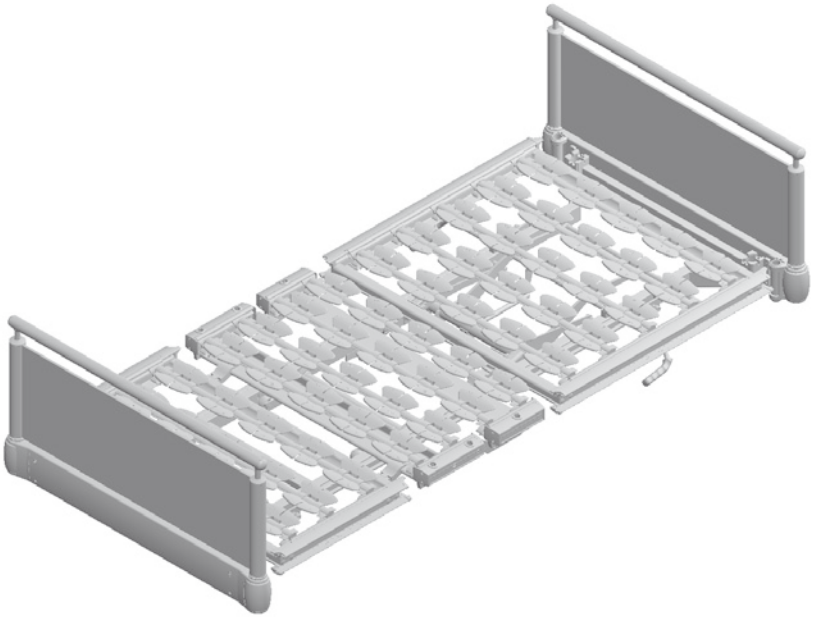
Bumper set for lying surface 210 cm;
BG3439

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F568 | Bumper set, back section | 2 |
| 02 | KT241-01 | Bumper set, seat section | 2 |
| 03 | KT239-01 | Bumper set, upper leg section | 2 |
| 04 | F686 | Bumper set, lower leg section | 2 |



# Head and foot board

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.



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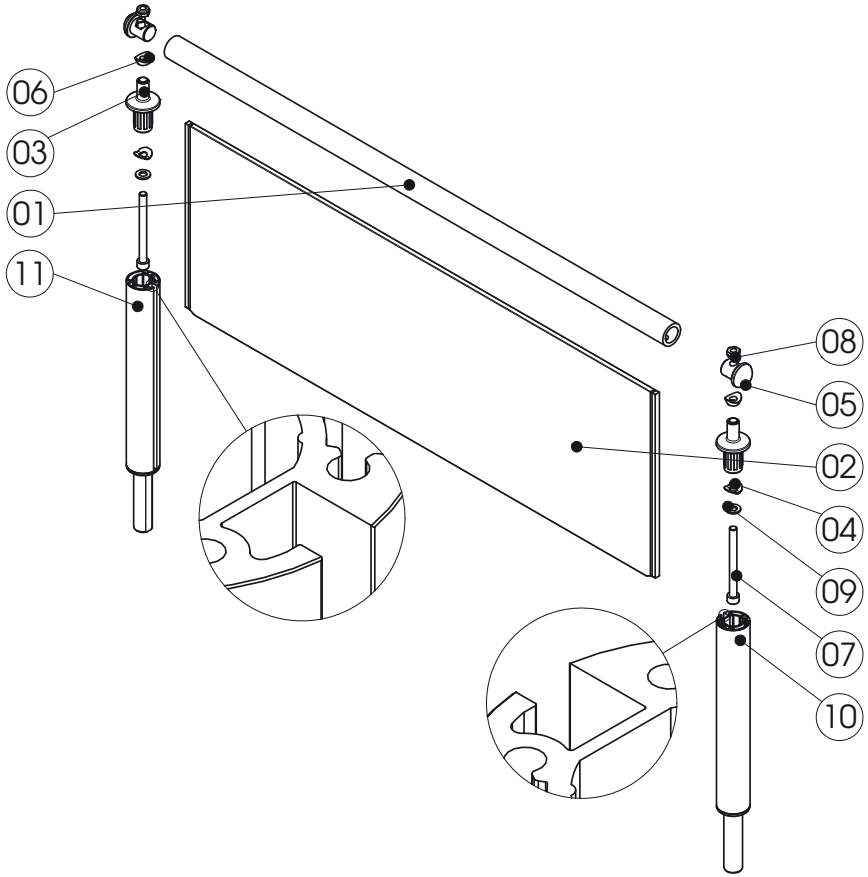
Head and foot board design variant B (variant) 🕮 120
Head and foot board design variant W (variant) 🕮 121
Aluminum corner tube 🕮 122
Head and foot board design variant MA (variant) 🕮 123

# Head and foot board | Head and foot board design variant S 1/2

Head and foot board design variant S
for lying surface 90 cm;
BG541-01

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP798 | Aluminum hand rail | 1 |
| 02 | HPL216 | Head and foot plate | 1 |
| 03 | KT262-01 | Tube cap Ø45 | 2 |
| 04 | F1439 | Clamp plate | 2 |
| 05 | KT264 | Spherical end cap | 2 |
| 06 | KT266 | Washer 4, plastic | 2 |
| 07 | SR517 | Cheese-head screw M10x110 | 2 |
| 08 | SR139 | Nut M10 DIN 985, galvanized | 2 |
| 09 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 2 |
| 10 | BG231 | Aluminum corner tube, right | 1 |
| 11 | BG232 | Aluminum corner tube, left | 1 |

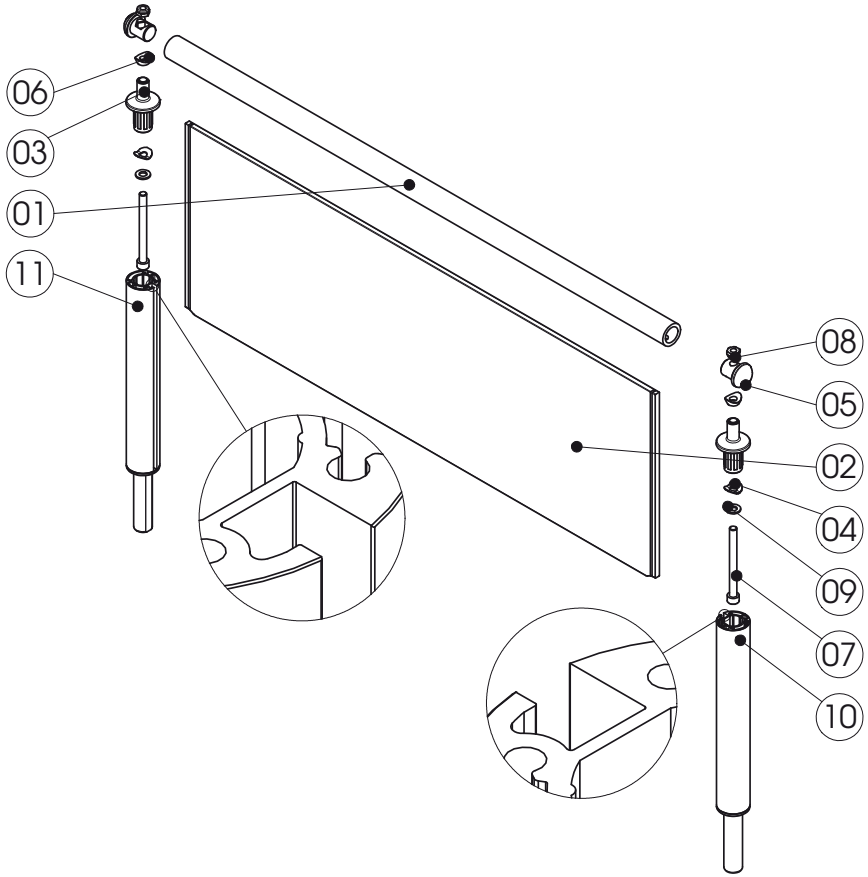



When ordering head or foot boards, please indicate the color code or ID number of the bed.

# Head and foot board | Head and foot board design variant S 2/2

Head and foot board design variant S
for lying surface 100 cm;
BG562

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP838 | Aluminum hand rail | 1 |
| 02 | HPL235 | Head and foot plate | 1 |
| 03 | KT262-01 | Tube cap Ø45 | 2 |
| 04 | F1439 | Clamp plate | 2 |
| 05 | KT264 | Spherical end cap | 2 |
| 06 | KT266 | Washer 4, plastic | 2 |
| 07 | SR517 | Cheese-head screw M10x110 | 2 |
| 08 | SR139 | Nut M10 DIN 985, galvanized | 2 |
| 09 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 2 |
| 10 | BG231 | Aluminum corner tube, right | 1 |
| 11 | BG232 | Aluminum corner tube, left | 1 |

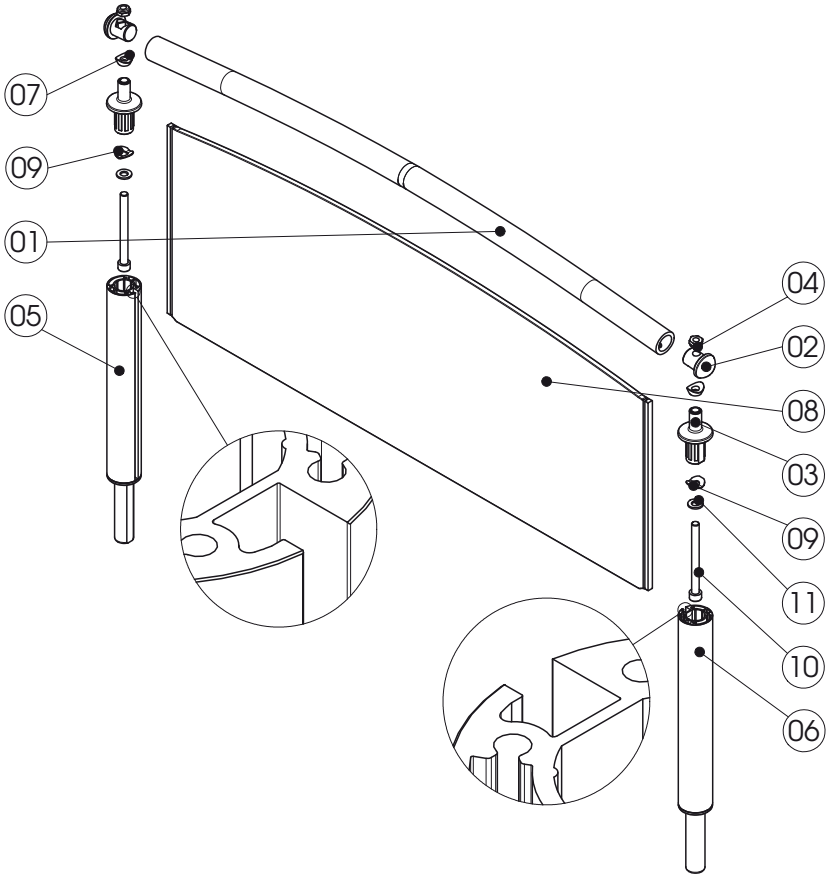



When ordering head or foot boards, please indicate the color code or ID number of the bed.

# Head and foot board | Head and foot board design variant B (variant)

Head and foot board design variant B
for lying surface 90 cm;
BG3550

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3177 | Aluminum hand rail, bend | 1 |
| 02 | KT264 | Spherical end cap | 2 |
| 03 | KT262-01 | Tube cap Ø45 | 2 |
| 04 | SR139 | Nut M10 DIN 985, galvanized | 2 |
| 05 | BG231 | Aluminum corner tube, right | 1 |
| 06 | BG232 | Aluminum corner tube, left | 1 |
| 07 | KT266 | Washer 4, plastic | 2 |
| 08 | HPL3127 | Head and foot plate | 1 |
| 09 | F1439 | Clamp plate | 2 |
| 10 | SR517 | Cheese-head screw M10x110, galvanized | 2 |
| 11 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 2 |

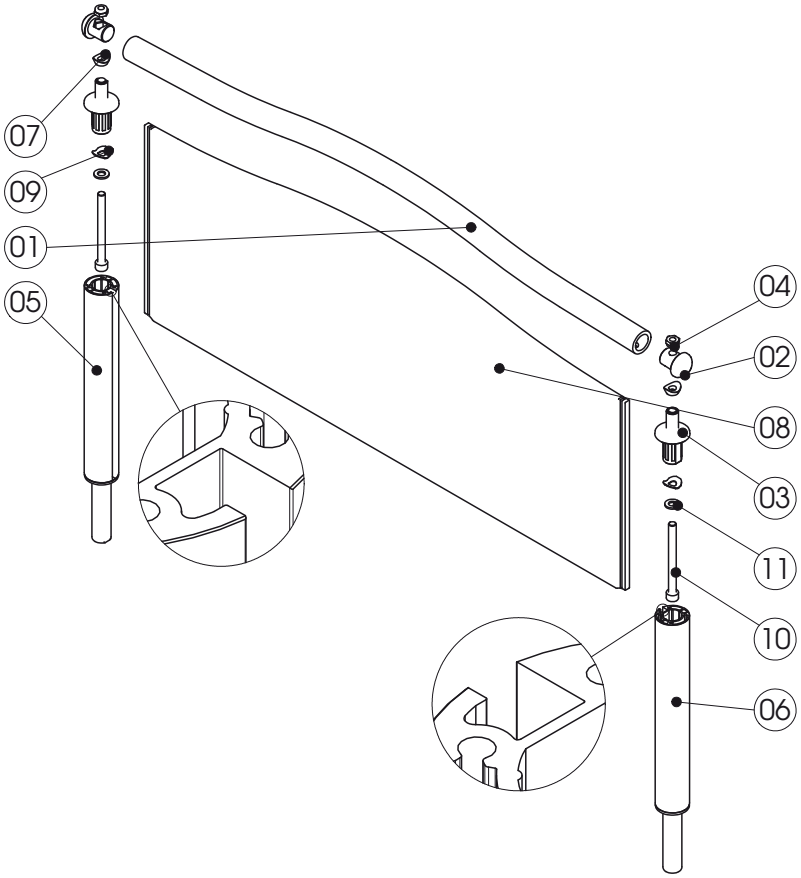



When ordering head or foot boards, please indicate the color code or ID number of the bed.

# Head and foot board | Head and foot board design variant W (variant)

Head and foot board design W
for lying surface 90 cm;
BG3551

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3179 | Aluminum hand rail, shaft | 1 |
| 02 | KT264 | Spherical end cap | 2 |
| 03 | KT262-01 | Tube cap Ø45 | 2 |
| 04 | SR139 | Nut M10 DIN 985, galvanized | 2 |
| 05 | BG231 | Aluminum corner tube, right | 1 |
| 06 | BG232 | Aluminum corner tube, left | 1 |
| 07 | KT266 | Washer 4, plastic | 2 |
| 08 | HPL3128 | Head and foot plate | 1 |
| 09 | F1439 | Clamp plate | 2 |
| 10 | SR517 | Cheese-head screw M10x110, galvanized | 2 |
| 11 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 2 |

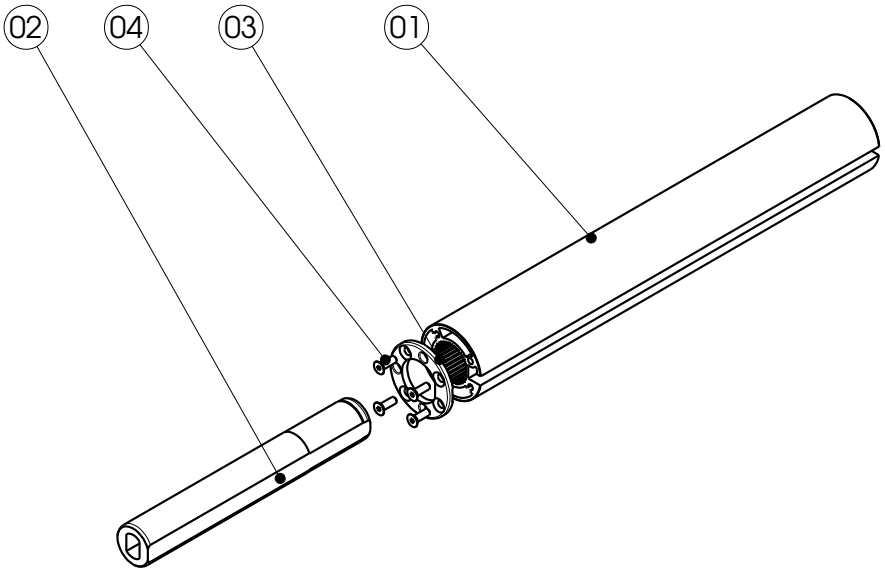



When ordering head or foot boards, please indicate the color code or ID number of the bed.

# Head and foot board | Head and foot board design variant S/B/W | Aluminum corner tube

Aluminum corner tube;
BG232 (left), BG231 (right)

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP770 | Corner tube | 1 |
| 02 | AP771 | locking pin | 1 |
| 03 | KT265 | End disk | 1 |
| 04 | SR534 | Countersunk screw M4x12 | 4 |



# Head and foot board | Head and foot board design variant MA (variant)

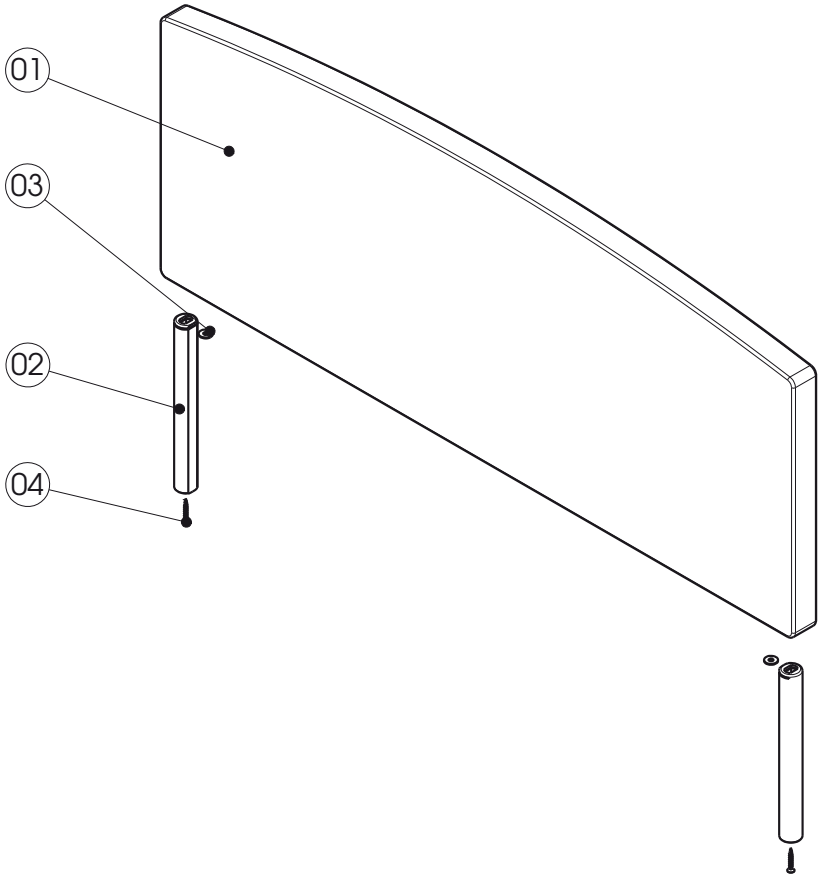
Head and foot board design variant MA (variant)
for lying surface 90 cm;
BG3326

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | H3385 | Head and foot board | 1 |
| 02 | F2400-02 | Plug-in tube | 2 |
| 03 | SR2275 | Washer 5.3x15x1,2 ISO 7093, galvanized | 2 |
| 04 | SR2274 | Chipboard screw 4.5x30 | 2 |

Head and foot board design variant MA (variant)
for lying surface 100 cm;
BG3329

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | H3387 | Head and foot board | 1 |
| 02 | F2400-02 | Plug-in tube | 2 |
| 03 | SR2275 | Washer 5.3x15x1,2 ISO 7093, galvanized | 2 |
| 04 | SR2274 | Chipboard screw 4.5x30 | 2 |

When ordering head or foot boards, please indicate the color code or ID number of the bed.



# Bed linen storage area (optional)

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts.

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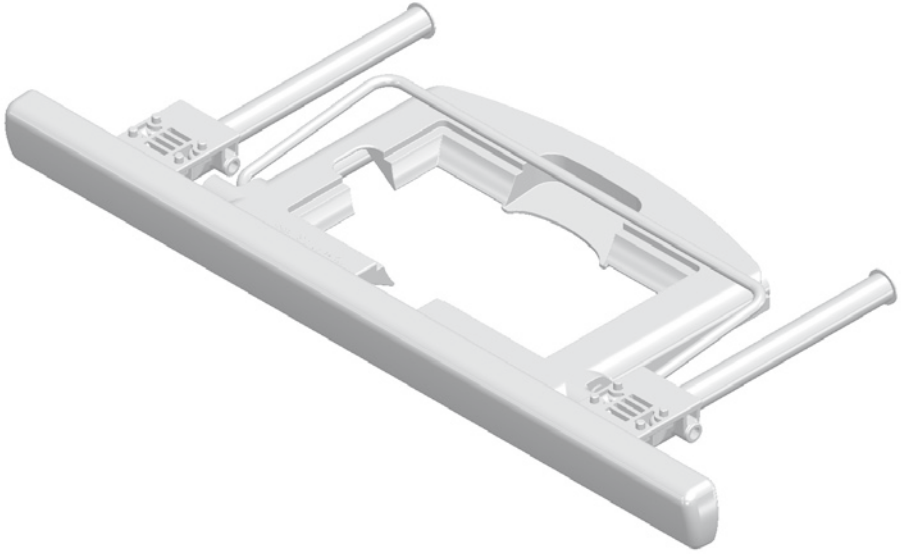
Bed linen storage area (bed without dynamic bed extension) 📖 125

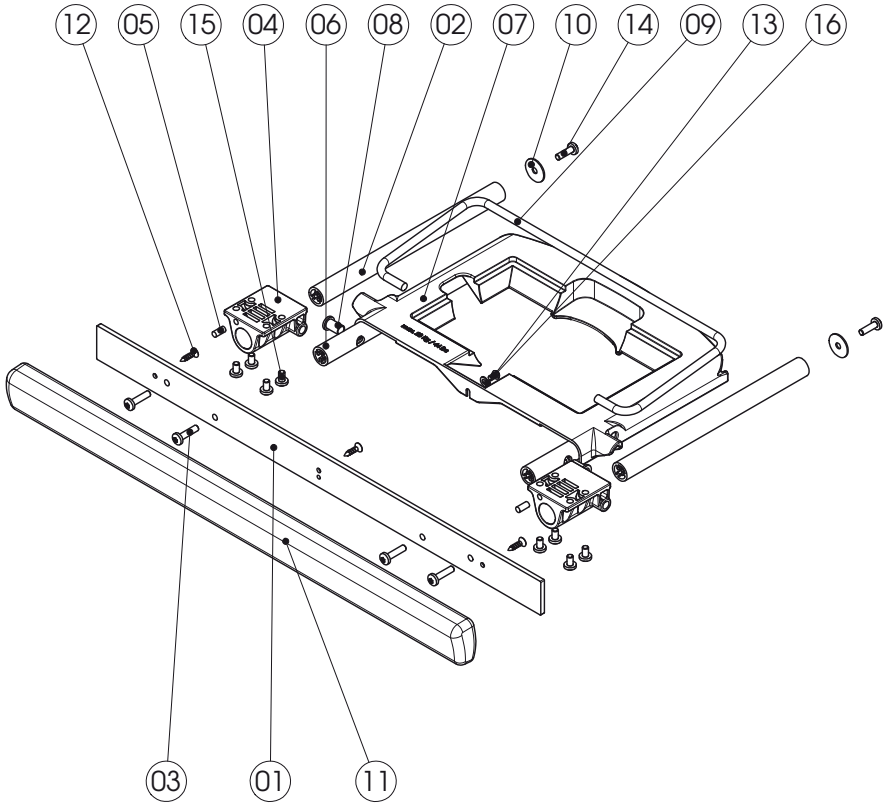
Bed linen storage area (bed with dynamic bed extension) 📖 126

# Bed linen storage area (optional) | Bed linen storage area (bed without dynamic bed extension)

Bed linen storage area (bed without dynamic bed extension);
BG4768

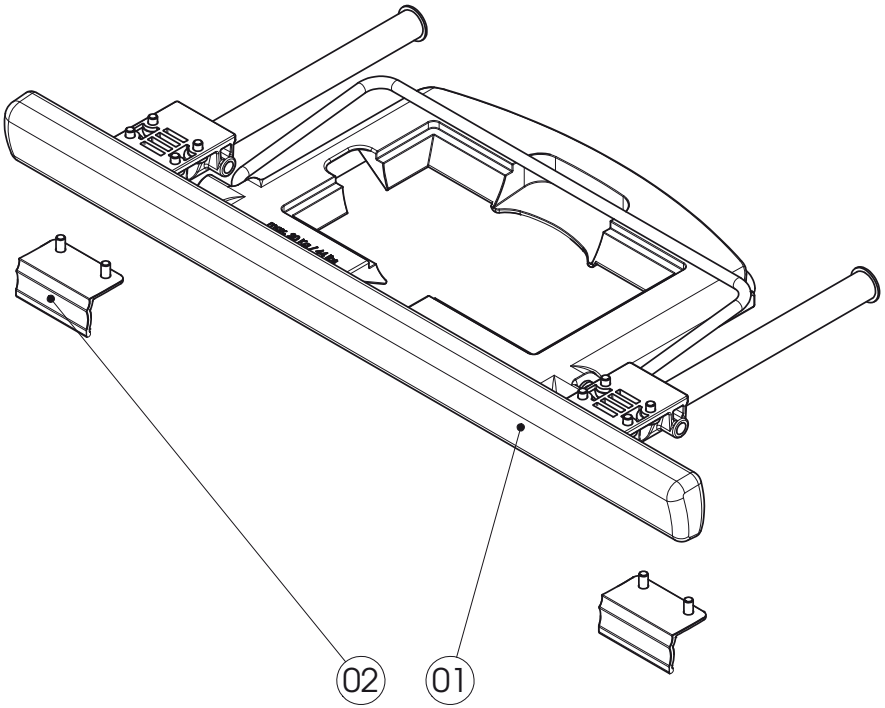
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3795 | Holding plate, screen | 1 |
| 02 | AP3379 | Guide tube 25.0 cm | 2 |
| 03 | SR2214 | Oval-head screw 6x25, Torx, galvanized | 4 |
| 04 | KT2094 | Guide, bed linen storage area | 2 |
| 05 | E2225 | Magnetic rod | 2 |
| 06 | AP2975 | Guide tube 20.5 cm | 2 |
| 07 | KT2729-02 | Bed linen storage area, insert | 1 |
| 08 | B006 | Insulating sheath | 2 |
| 09 | F3269 | Folding clip | 1 |
| 10 | SR2097 | Fender disk 6.4x25x1.25 | 2 |
| 11 | KT2728 | Screen, bed linen storage area | 1 |
| 12 | SR2074 | Chipboard screw 5x20, SEKO Torx, galvalized | 3 |
| 13 | SR2315 | Flat head screw M5x8, galvanized | 1 |
| 14 | SR2213 | Oval-head screw 6x20, Torx, galvanized | 2 |
| 15 | SR2212 | Oval-head screw 6x10, Torx, galvanized | 8 |
| 16 | SR071 | Washer Ø5.3 DIN 125, Form A, galvanized | 1 |



# Bed linen storage area (optional) | Bed linen storage area (bed with dynamic bed extension) 1/3

Bed linen storage area (bed with dynamic bed extension);
BG5078

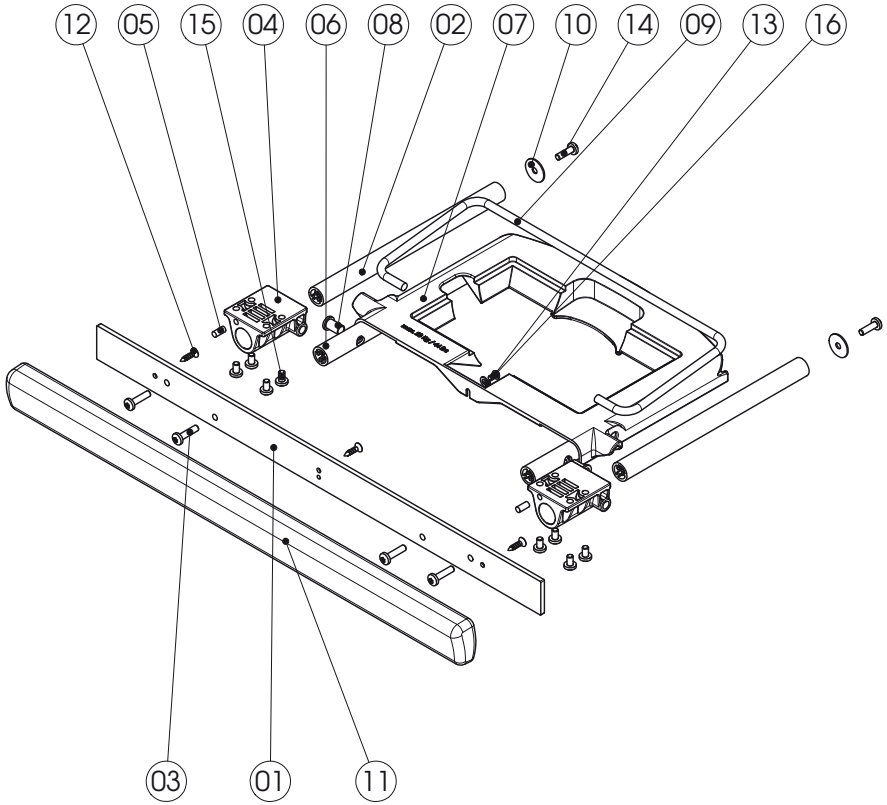
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | BG4768 | Bed linen storage area | 1 |
| 02 | BG5077 | Pulling bracket set | 1 |



# Bed linen storage area (optional) | Bed linen storage area (bed with dynamic bed extension) 2/3

Bed linen storage area (bed with dynamic bed extension);
BG4768

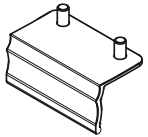
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | F3795 | Holding plate, screen | 1 |
| 02 | AP3379 | Guide tube 25.0 cm | 2 |
| 03 | SR2214 | Oval-head screw 6x25, Torx, galvanized | 4 |
| 04 | KT2094 | Guide, bed linen storage area | 2 |
| 05 | E2225 | Magnetic rod | 2 |
| 06 | AP2975 | Guide tube 20.5 cm | 2 |
| 07 | KT2729-02 | Bed linen storage area, insert | 1 |
| 08 | B006 | Insulating sheath | 2 |
| 09 | F3269 | Folding clip | 1 |
| 10 | SR2097 | Fender disk 6.4x25x1.25 | 2 |
| 11 | KT2728 | Screen, bed linen storage area | 1 |
| 12 | SR2074 | Chipboard screw 5x20, SEKO Torx, galvalized | 3 |
| 13 | SR2315 | Flat head screw M5x8, galvanized | 1 |
| 14 | SR2213 | Oval-head screw 6x20, Torx, galvanized | 2 |
| 15 | SR2212 | Oval-head screw 6x10, Torx, galvanized | 8 |
| 16 | SR071 | Washer Ø5.3 DIN 125, Form A, galvanized | 1 |

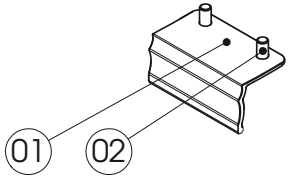


# Bed linen storage area (optional) | Bed linen storage area (bed with dynamic bed extension) 3/3

Bed linen storage area, pulling bracket set
(Bed with dynamic bed extension);
BG5077

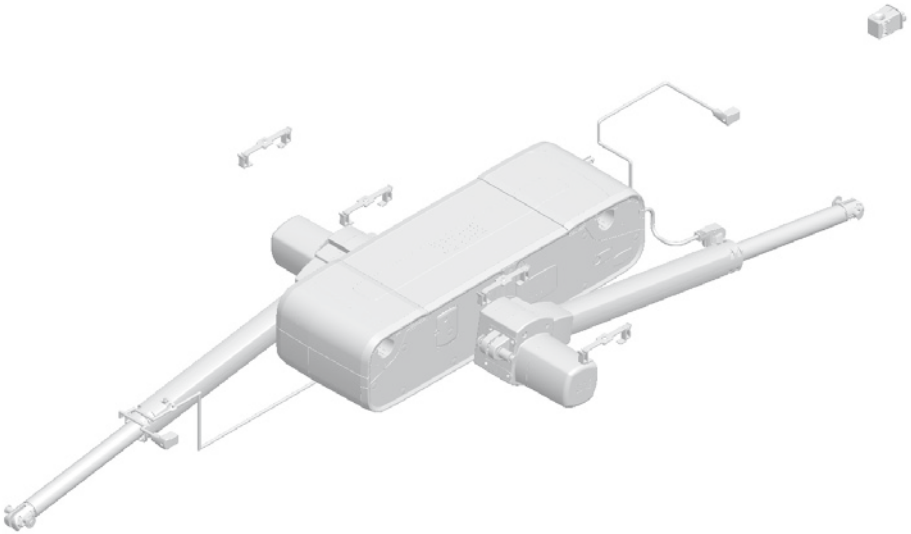
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | AP3380 | Pulling bracket | 2 |
| 02 | SR300 | Oval-head screw M6x12, self-tapping, Form CE, Torx | 4 |





# Electronics

This section contains exploded views and assembly parts lists which are divided into corresponding individual parts as well as a description of how to replace the parts.



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- Replacing the dual drive 🕮 135
- Replacing the battery pack 🕮 137
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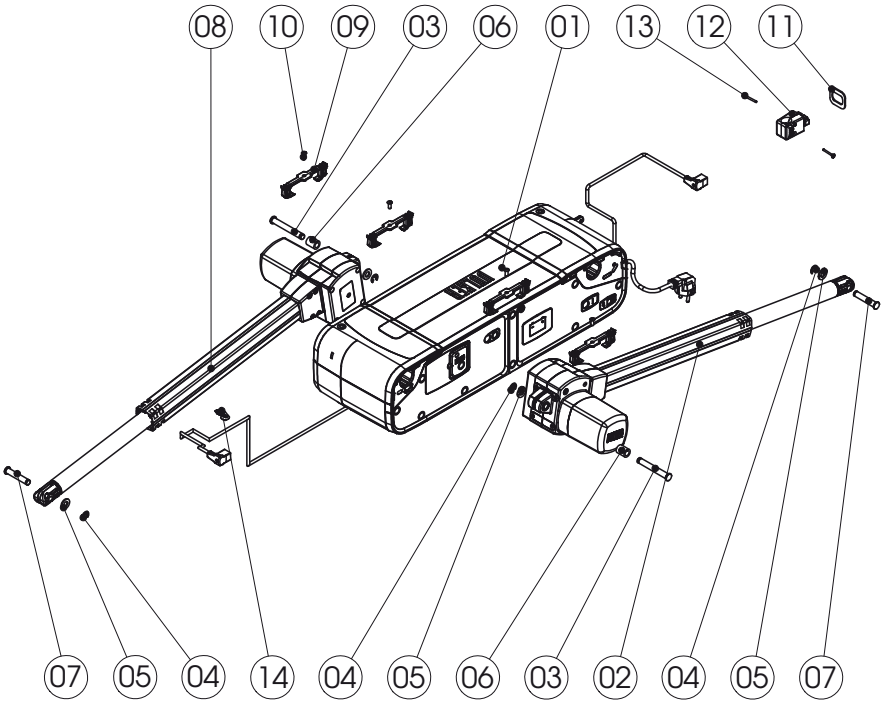
- Replacing the single drive 🕮 144

Hand control and nurse hand control / keypad 🕮 146
- Replacing the hand control and nurse hand control / keypad 🕮 147

Electronics

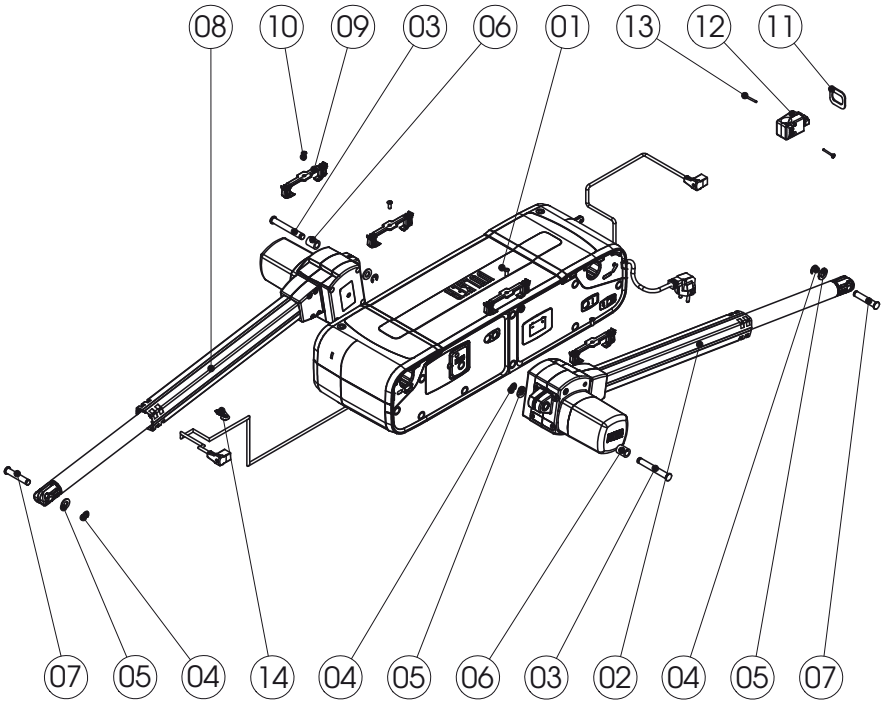
| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | - | Dual drive DA02<br>*(Variants 📖 132)* | 1 |
| 02 | BG4962 | Single drive, lowest bed lift head | 1 |
| 03 | F3530-02 | Bolt, lift motor, frame | 2 |
| 04 | SR2384 | Locking washer 8 DIN 6799, galvanized | 4 |
| 05 | SR2260 | Washer 10.5 ISO 7089, Form A, galvanized | 4 |
| 06 | KT3215 | Spacer sleeve | 2 |
| 07 | F3480 | Bolt, lift motor | 2 |
| 08 | BG4963 | Single drive, lowest bed lift foot | 1 |
| 09 | KT3164-02 | Cable clip, low bed | 4 |
| 10 | SR346 | Oval head screw M5x12 DIN 7500, self-tapping, Torx, galvanized | 4 |
| 11 | KT3252 | Washer, strain relief | 1 |
| 12 | KT2333-03 | Strain relief | 1 |
| 13 | SR2266 | Countersunk screw, plastic 4x28 K40x28, Torx | 2 |
| 14 | KT3266 | Cable band Ø4.5x180mm | 1 |




☞ *Continued on next page.*

# Electronics | Electronics 2/2

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| - | - | Hand control<br>*(not shown - Variants 📖 146)* | 1 |
| - | - | Nurse hand control / nurse keypad<br>*(not shown - Variants 📖 146)* | 1 |
| - | BG4386-01 | Potential connection<br>*(not shown)* | 1 |
| - | E529-01 | Blind plug<br>*(not shown)* | |
| | | | |
| - | VDS | Völker Diagnostic System (VDS)<br>*(not shown, available as option for Service)* | 1 |



## Dual drive DA02

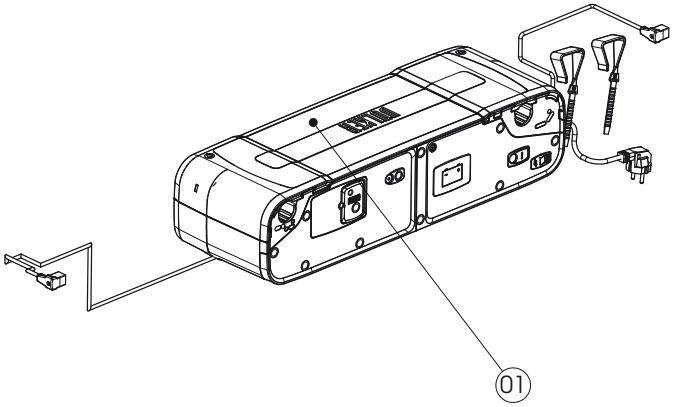
| Item | Article | Qty |
|---|---|---|
| 01 | *Dual drive* DA02<br>*(See below for variants)* | 1 |

## Variants

| Country variant | Trans-former | Art. no. | Article |
|---|---|---|---|
| D | 230V | BG4967 | DA02 D CPR NFS 24V DK S582 2SP |
| D | 230V | BG5148 | DA02 D CPR NFS 24V DK S582 3SP |
| D | 230V | BG5153 | DA02 D CPR NFS 24V DK S582 3SP Anaconda |
| D | 230V | BG5154 | DA02 D CPR NFS 24V DK S582 3SP Anaconda short |
| D | 230V | BG5115 | DA02 D CPR NSi 24V DK S582 2SP |
| AUS | 230V | BG5150 | DA02 AUS CPR NFS 24V DK S582 3SP |
| BRA | 230V | BG5152 | DA02 BRA CPR NFS 24V DK S582 3SP |
| BRA | 110V | BG5237 | DA02 BRA CPR NFS 24V DK S582 3SP |
| CH | 230V | BG5127 | DA02 CH CPR NFS 24V DK S582 2SP |
| CH | 230V | BG5149 | DA02 CH CPR NFS 24V DK S582 3SP |
| CH | 230V | BG5116 | DA02 CH CPR NSi 24V DK S582 2SP |
| F | 230V | BG5126 | DA02 F CPR NFS 24V S582 2SP |
| F | 230V | BG5147 | DA02 F CPR NFS 24V S582 3SP |
| F | 230V | BG5114 | DA02 F CPR NSi 24V S582 2SP |
| UK | 230V | BG5117 | DA02 UK CPR NSi 24V DK S582 2SP |
| UK | 230V | BG5151 | DA02 UK CPR NFS 24V DK S582 3SP |
| USA | 110V | BG5236 | DA02 USA CPR NFS 24V S582 3SP |

*Key*

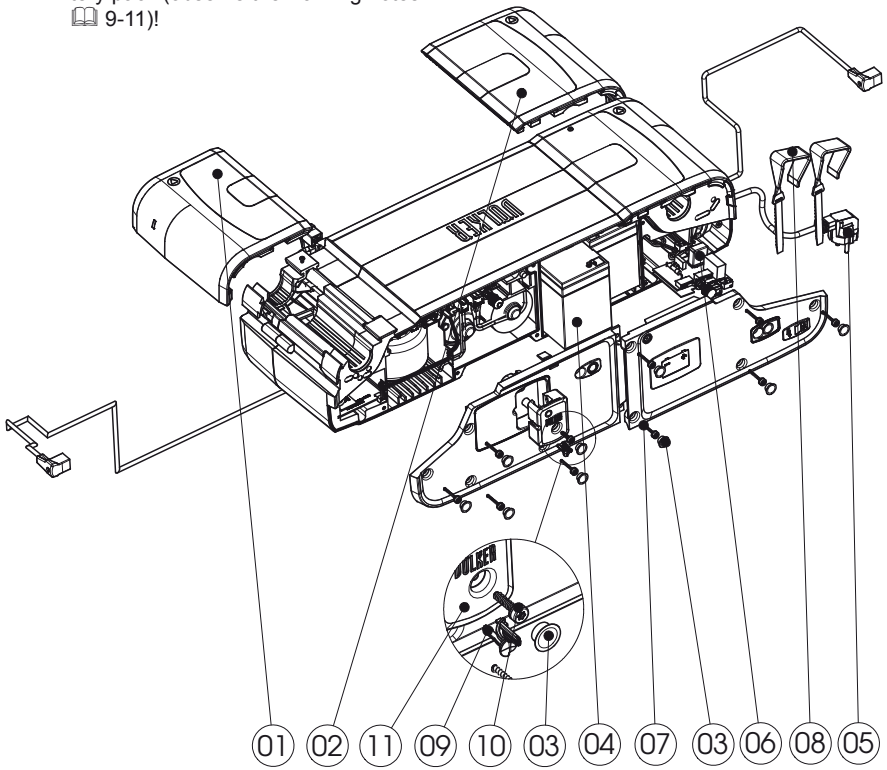
| *Abbreviation* | *Designation* |
|---|---|
| *DA02* | *Dual drive DA02* |
| *CPR* | *Cardiopulmonary resuscitation* |
| *NFS* | *Mains isolation switch* |
| *NSi* | *Mains fuse* |
| *DK* | *Double click (Automatic function)* |
| *SP* | *Slots* |



Dual drive DA02, spare parts

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| 01 | KT2988 | Housing slide, upper leg section | 1 |
| 02 | KT2987 | Housing slide, back section | 1 |
| 03 | KT3048 | Cap, cover screw | 11 |
| 04 | E2434 | Battery 12V, 5.4Ah | 2 |
| 05 | - | Mains cable<br>*(Variants 📖 134)* | 1 |
| 06 | - | PCB ... | 1 |
| | E2357 | ... Mains isolation switch 230V | |
| | E2415 | ... Mains isolation switch 115V | |
| | E2410 | ... Mains fuse 230V | |
| | E2416 | ... Mains fuse 115V | |
| 07 | SR2583 | Cheese-head screw, Ø4x25, Remform® special with groove, galvanized | 11 |
| 08 | KT2669 | Cable hook | 2 |
| 09 | KT3091 | Locking part, plug cover | 1 |
| 10 | SR2584 | Cheese-head screw, Ø4x16, Remform® special with groove, galvanized | 1 |
| 11 | KT2989 | Plug cover | 1 |
| - | E529-01 | Blind plug Pulsotronik<br>*(not shown)* | |

⚠ **WARNING** Before carrying out any repair work, always disconnect the mains plug **and** disconnect the bed from the battery pack (observe the warning notes 📖 9-11)!



Variants, mains cable

| Country variant | Art. no. | Article |
|---|---|---|
| D / F | K2237 | Mains cable, spiral, EU |
| D | N.N. | Mains cable Anaconda, short, EU |
| D | N.N. | Mains cable Anaconda, long, EU |
| AUS | K2240 | Mains cable, spiral, AUS |
| BRA | K2241 | Mains cable, spiral, BRA |
| CH | K2239 | Mains cable, spiral, CH |
| UK | K2235 | Mains cable, spiral, UK |
| USA / BRA | K2238 | Mains cable, spiral, US |

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (Fig. 02) and make sure of settings, if necessary.
03. Elevate bed with horizontal lying surface and, if necessary, remove head and foot board (Fig. 03).
04. Remove mains plug from the mains socket (not illustrated).
05. Remove strain relief (Fig. 05).
06. Uncouple CPR (Fig. 06).
07. Remove connecting cable of both single drives (Fig. 07).

Fig. 01

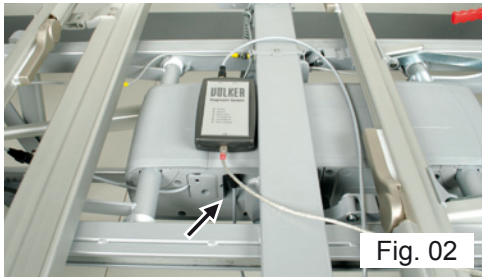


Fig. 02

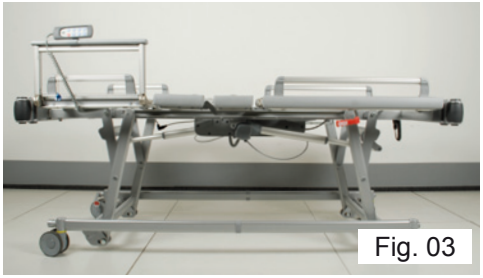


Fig. 03

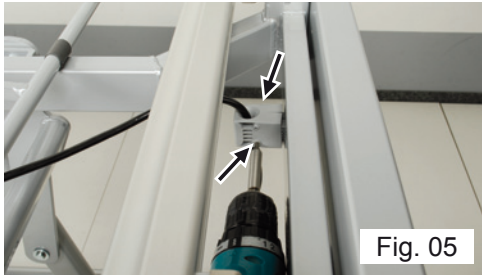


Fig. 05

Fig. 06

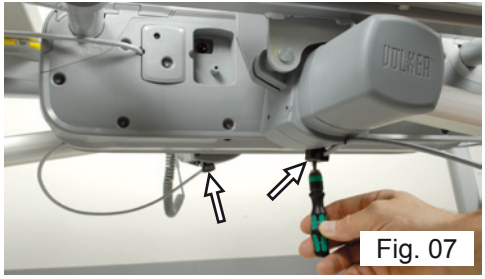


Fig. 07

08. Raise upper and lower leg section to maximum and secure Rastomat with screw clamp (Fig. 08).
09. Remove head end housing slide (Fig. 09).
10. Raise dual drive with motor frame fitting slightly and remove from bed downwards (Fig. 10).
11. Remove foot end housing slide (Fig. 11).
12. Installation in reverse order (Not illustrated).

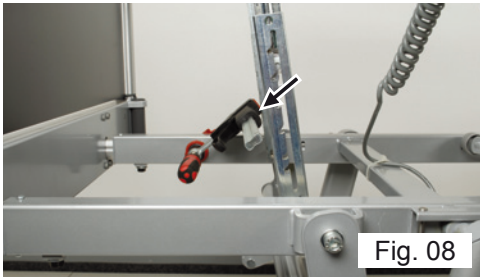


Fig. 08

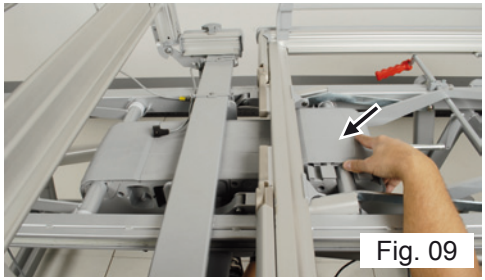


Fig. 09

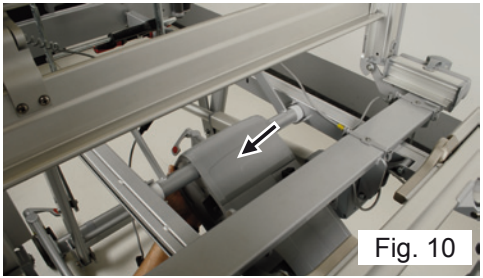


Fig. 10

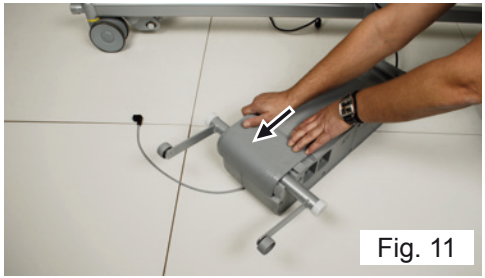


Fig. 11

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (if installed) (Fig. 02).
03. Elevate bed with horizontal lying surface and, if necessary, remove head and foot board (Fig. 03).
04. Remove mains plug from the mains socket (not illustrated).
    Attention: 115/230 V are applied!
05. Remove strain relief (Fig. 05).
06. Uncouple CPR (Fig. 06).
07. Remove head end housing slide (Fig. 07).

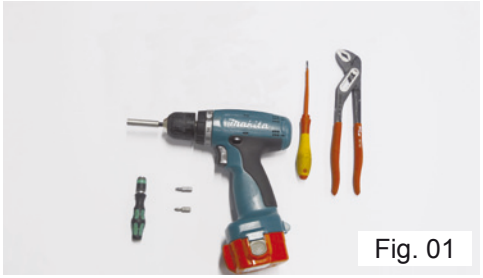


Fig. 01

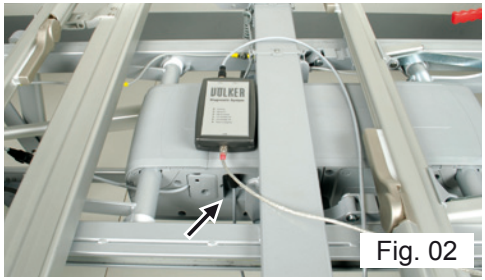


Fig. 02

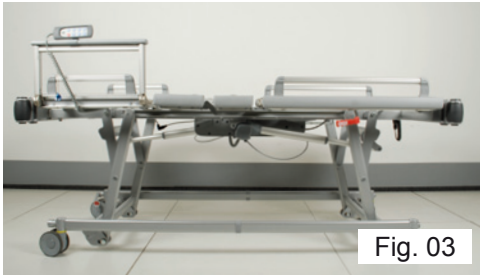


Fig. 03

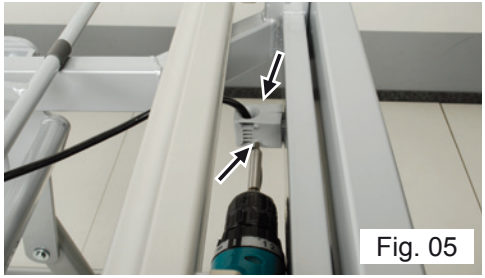


Fig. 05

Fig. 06

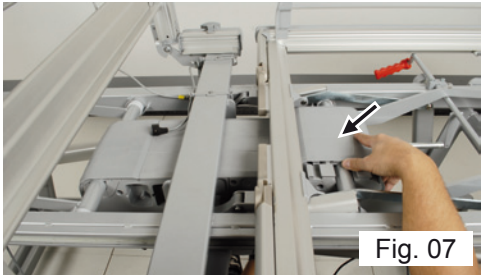


Fig. 07

08. Slowly tilt dual drive downwards (Fig. 08).
09. Remove cover from battery compartment (Fig. 09).
10. Replace batteries (Fig. 10).
11. Installation in reverse order (Not illustrated).

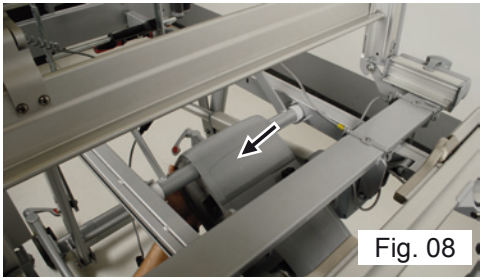


Fig. 08

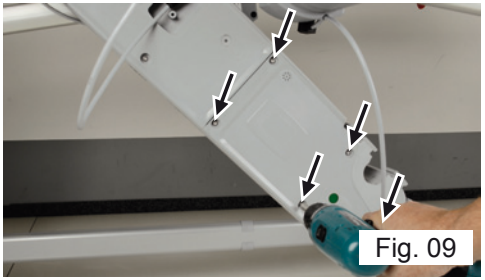


Fig. 09

Fig. 10

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (if installed) (Fig. 02).
03. Elevate bed with horizontal lying surface and, if necessary, remove head and foot board (Fig. 03).
04. Remove mains plug from the mains socket (not illustrated).
    Attention: 115/230 V are applied!
05. Remove strain relief (Fig. 05).
06. Uncouple CPR (Fig. 06).
07. Remove head end housing slide (Fig. 07).

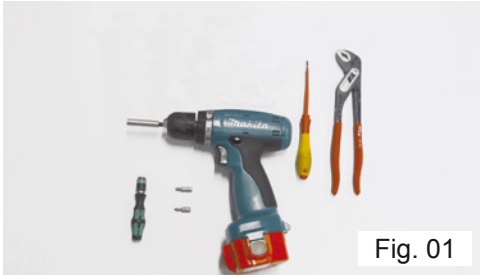


Fig. 01

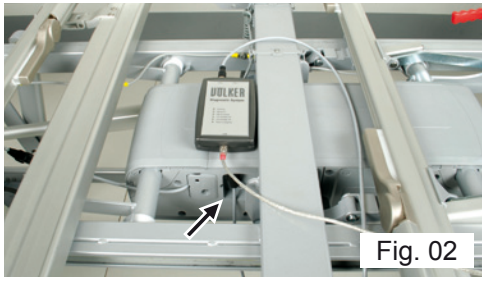


Fig. 02

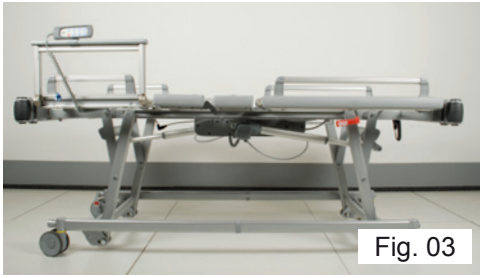


Fig. 03

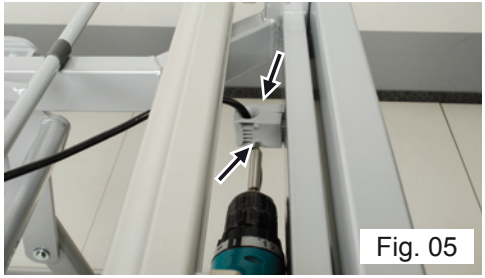


Fig. 05

Fig. 06

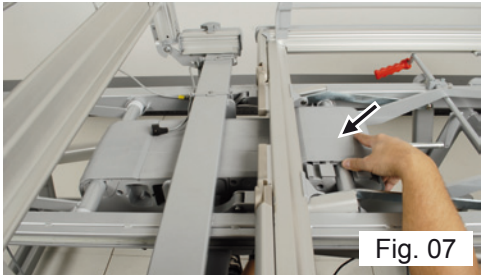


Fig. 07

08. Slowly tilt dual drive downwards (Fig. 08).
09. Remove cover from battery compartment (Fig. 09).
10. Pull out both plugs (Fig. 10).
11. Replace PCB (Fig. 11).
12. Installation in reverse order (Not illustrated).

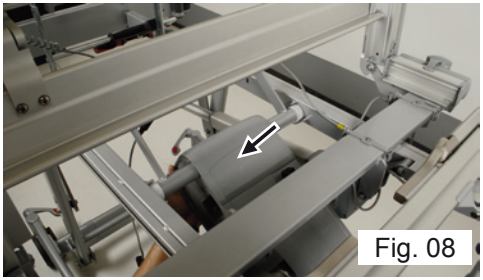


Fig. 08

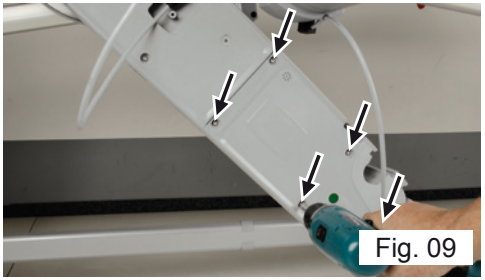


Fig. 09

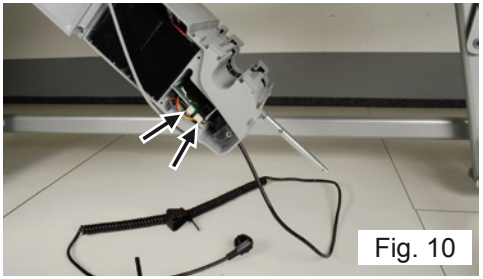


Fig. 10

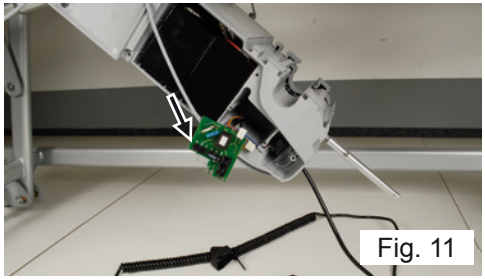


Fig. 11

01. Steps 1-10 📖 139 "Replacing the mains isolation switch"
02. Loosen strain relief (Fig. 02).
03. Remove strain relief and replace mains cable (Fig. 03).
04. Installation in reverse order (Not illustrated).

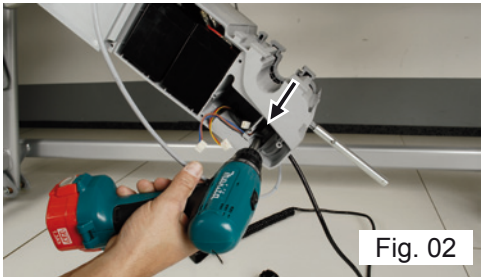


Fig. 02

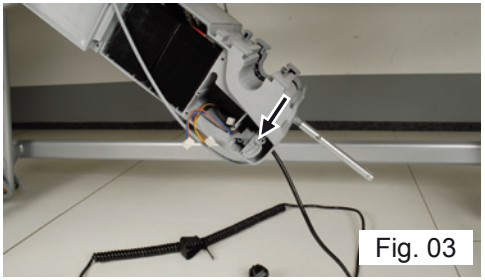


Fig. 03

01. Tools required (Fig. 01).
02. Take protective measures against electrostatic discharge (not illustrated).
03. Connect Gateway or VDS (Völker Diagnostic System) (Fig. 03).
04. Elevate bed with horizontal lying surface and, if necessary, remove head and foot board (Fig. 04).
05. Remove mains plug from the mains socket (not illustrated).
    Attention: 115/230 V are applied!
06. Remove strain relief (Fig. 06).
07. Uncouple CPR (Fig. 07).
08. Remove connecting cable of both single drives (Fig. 08).

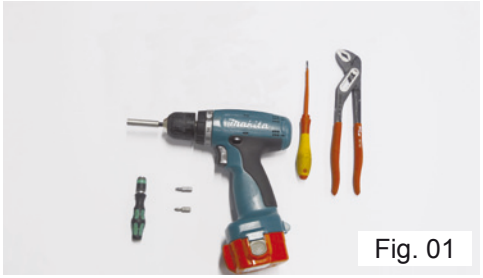


Fig. 01

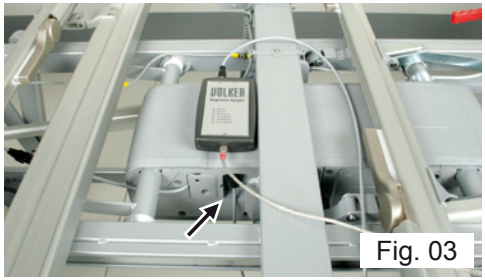


Fig. 03

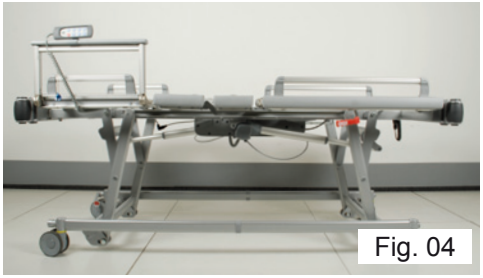


Fig. 04

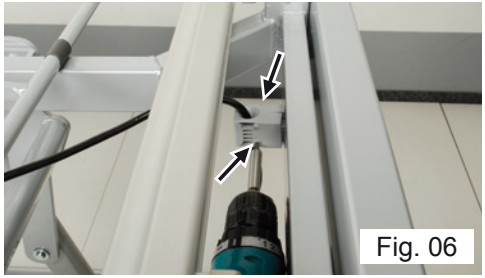


Fig. 06

Fig. 07

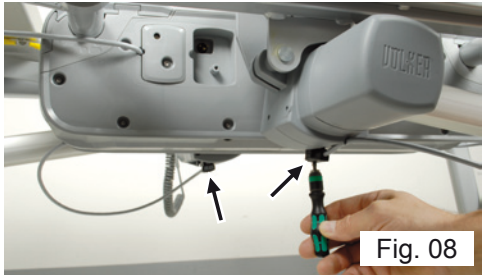


Fig. 08

09. Remove head end housing slide (Fig. 09).
10. Slowly tilt dual drive downwards (Fig. 10).
11. Remove cover from battery compartment (Fig. 11).
12. Remove cover from PCB compartment (Fig. 12).
13. Remove two plugs and PCB (Fig. 13).
    Attention: It is strictly necessary to take electrostatic protection measures!
14. Remove button cell (Fig. 14).
15. Installation in reverse order (Not illustrated).

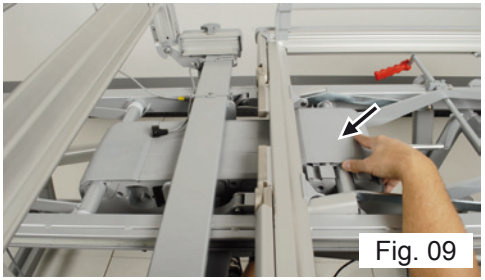


Fig. 09

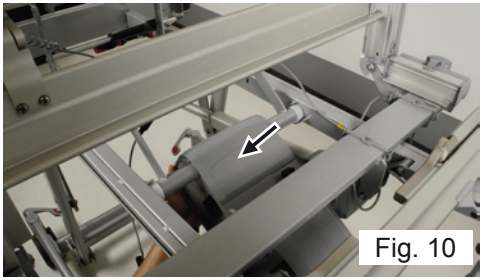


Fig. 10

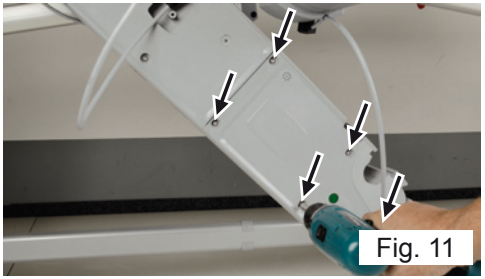


Fig. 11

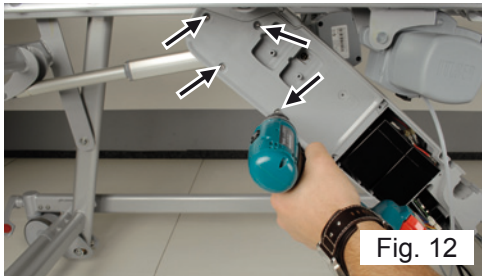


Fig. 12

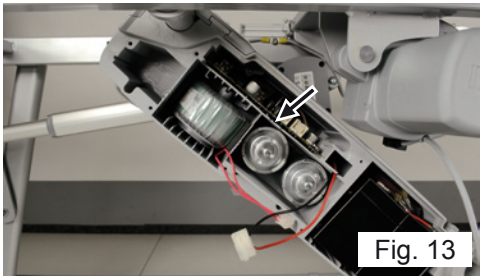


Fig. 13

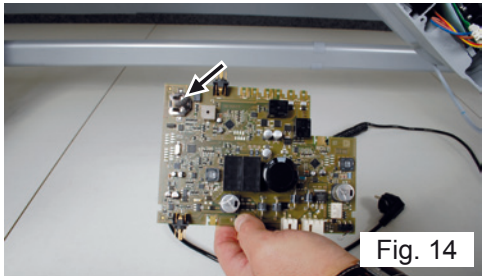


Fig. 14

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (if installed) (Fig. 02).
03. Elevate bed, raise back, upper and lower leg section to maximum and, if necessary, remove head and foot board (Fig. 03).
04. Remove mains plug from the mains socket (not illustrated).
05. Block frame from falling down at the head or foot end (depending on which single drive is to be replaced) using a screw clamp (Fig. 05).
06. Remove connecting cable from the single drive (Fig. 06).
07. Loosen outer fastening of the single drive (Fig. 07).

Fig. 01

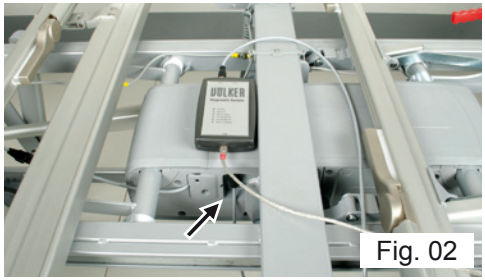


Fig. 02

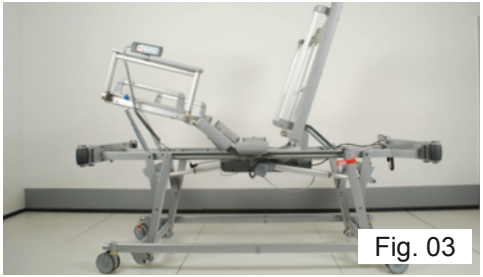


Fig. 03

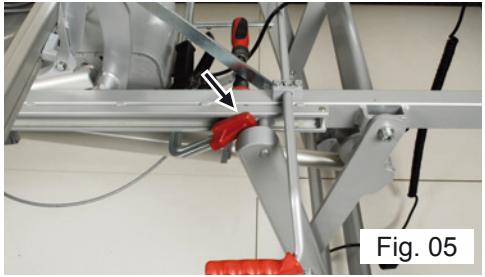


Fig. 05

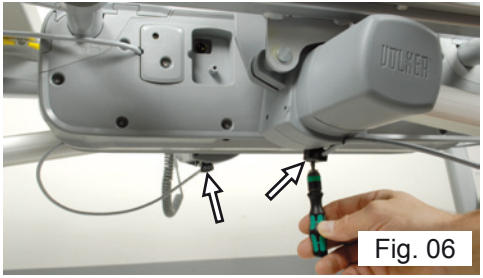


Fig. 06

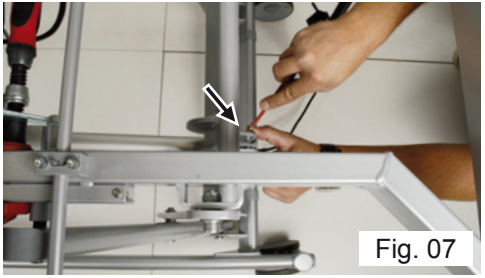


Fig. 07

08. Loosen inner fastening of the single drive (Fig. 08).
09. Remove blind plug from the new single drive (Fig. 09).
10. Installation in reverse order (Not illustrated).

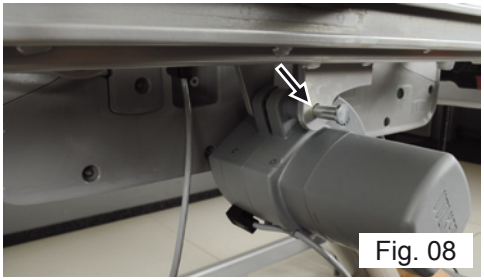


Fig. 08

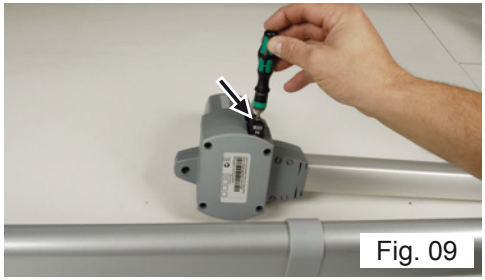


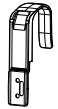
Fig. 09

## Hand control

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| Standard | E2370 | Hand control<br>Comfort with hook | 1 |
| Optional | E2371 | Hand control<br>Comfort crosswise with clip | 1 |
| Optional | E2240-01 | Hand control<br>Auto-Contour with hook | 1 |
| Optional | E2241-01 | Hand control<br>Auto-Contour crosswise with clip | 1 |

Hand control
Comfort with hook

## Hand control hook

| | Art. no. | Article |
|---|---|---|
|  | KT2486-01 | Hand control hook longitudinal |
| | KT2487 | Hand control crosswise |

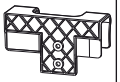
## Nurse hand control / nurse keypad

| Item | Art. no. | Article | Qty |
|---|---|---|---|
| Standard | E2418 | Nurse hand control<br>with total lock-out<br>(Easy-Lock) | 1 |
| Optional | E2208-01 | Nurse keypad<br>with total lock-out | 1 |
| Optional | E2209-01 | Nurse keypad<br>with individual lock | 1 |
| Optional | E2207-01 | Nurse keypad<br>with individual lock<br>and automatic functions | 1 |

Nurse hand control
Easy Lock (standard)

Nurse keypad
(optional)

## Nurse keypad hook

| | Art. no. | Article |
|---|---|---|
| | KT2204-01 | Hook for<br>nurse keypad<br>(for beds in design variant S) |
|  | KT2401-05 | Hook for nurse keypad<br>(for beds in design variant MA) |

***NOTE*** The article numbers of your hand control or your nurse keypad can be found on the rear of these.

01. Tools required (Fig. 01).
02. Connect Gateway or VDS (Völker Diagnostic System) (if installed) (Fig. 02).
03. Elevate bed with horizontal lying surface, raise back, upper and lower leg section to maximum and, if necessary, remove head and foot board (Fig. 03).
04. Remove mains plug from the mains socket (not illustrated).
05. Remove plug cover with connection plug (Fig. 05).
06. Remove connection plug and cable from the plug cover (Fig. 06).
07. Installation in reverse order (Not illustrated).

Fig. 01

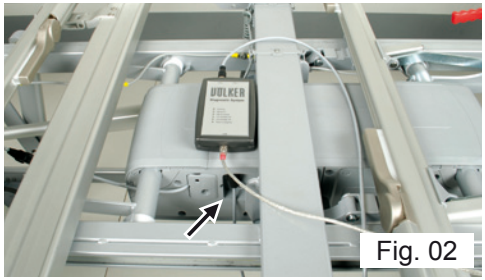


Fig. 02

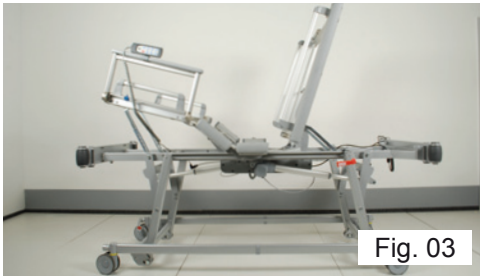


Fig. 03

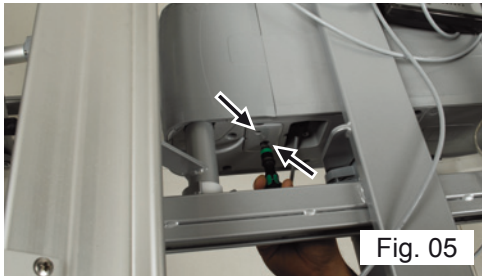


Fig. 05

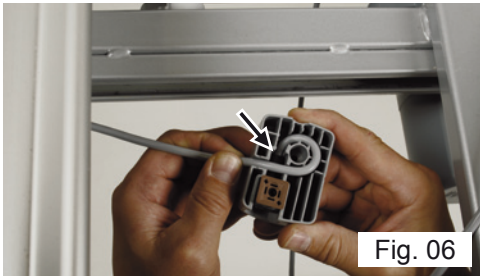


Fig. 06

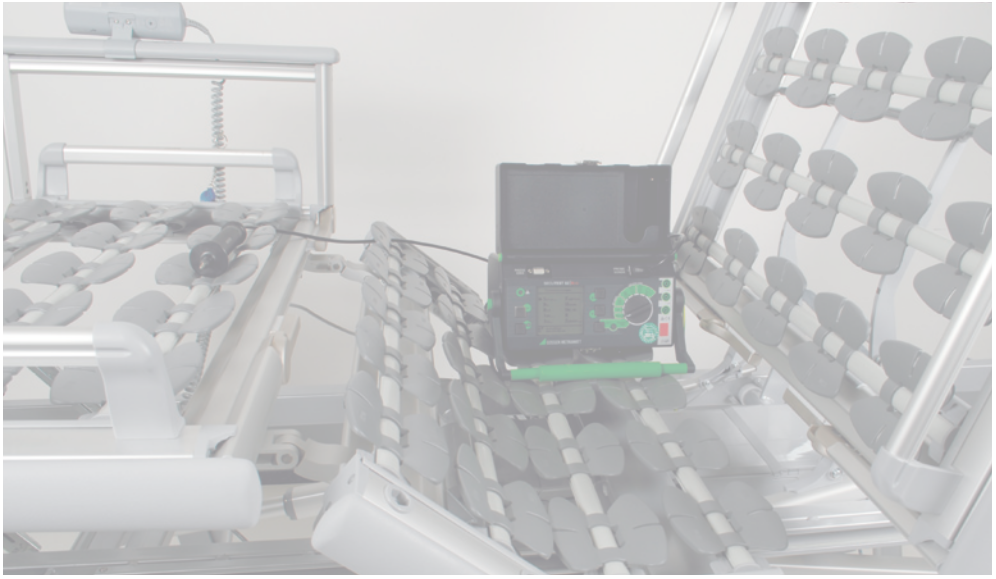
# Maintenance

The **Maintenance** section contains information on how to carry out maintenance work.

## CONTENTS

Staff training, Safety notes 🕮 149

Maintenance schedule 🕮 150



### Staff Training

Anyone responsible for carrying out maintenance and servicing must at least have read the safety notes for the respective bed model and be qualified in accordance with MPBetreibV § 4. The requirements for personnel defined by the Medical Device Operator Ordinance must be ensured by the bed operator.

To ensure that the beds work properly, the instructions for use and the bed service manual must always be accessible to the service personnel.

Before commencing maintenance work, the service manual and the instructions for use must be read in full by the person responsible for carrying out the servicing.

### Safety notes

During maintenance and technical checks, the following specifications must be strictly observed:

- The room's electrical installations must satisfy the current technical requirements and the bed must be used correctly.
- The castors must be placed in the "brake position".
- The beds are not protected against explosion and must therefore only be maintained in an environment free from flammable substances and materials.

⚠ **WARNING** Before carrying out repair work, always disconnect the mains plug **and** disconnect the bed from the battery pack by pressing the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control or the buttons "back section down", "upper leg section down" and “ON” on the nurse keypad at the same time!

⚠ **WARNING** Maintenance and repair work should only be carried out after the bed has been disinfected.

⚠ **WARNING** Maintenance and repair work should only be carried out on an unoccupied bed. The patient may also have to be transferred to another bed before starting the work.

⚠ **WARNING** After maintenance (repair) work is complete, always check that the bed is functioning correctly. It must be checked that the bed can be used correctly without risk to the patient or care personnel.

The bed requires little maintenance. All movable parts for the height adjustment mechanism, the lying surface drives and the side rails are provided with long-lasting lubricant at the factory. It is recommended that **the bed is subjected to a regular, or at least once a year, technical control** 📖 151 **(including visual inspection and functional check) as described in the checklist** 📖 179**.** Any discernible damage must be eliminated immediately.

After every lengthy period of non-use, a visual inspection and functional check must be carried out.

| Period | Works to be performed |
|---|---|
| Annually | Technical control 📖 151<br><br>Lubrication of the castors in the C profiles under the lying surface with Vaseline |
| After lengthy periods of non-use | Visual inspection and functional check |
| If required | Lubrication of mechanical parts<br><br>Replacement of the battery pack if defective<br><br>Replacement of wearing parts if defective<br>• Wings (if fitted)<br>• Spring elements (if fitted)<br><br>Replacement of button cell for real-time clock if defective or every 5-6 years (a VDS (Völker Diagnostic System) is necessary for this) |

# Technical control

The section entitled **Technical check** contains all the information needed to carry out the technical control in accordance with MPBetreibV, BGVA3, UVV on hospital and healthcare beds and measurement as per DIN EN 62353 (Form 🕮 179). Other (e.g. country-specific) specifications have not been included here. This does not absolve the operator from the obligation to observe any such specifications.

## CONTENTS


Visual inspection 🕮 152

Functional check of the side rails 🕮 152

Functional check of the brakes 🕮 153

Functional check of the drives 🕮 153

Mains connection cable 🕮 153

Cabling 🕮 153

Housing 🕮 153

Mechanical check 🕮 153

Measurement in accordance with DIN EN 62353 🕮 154

Trapeze bar grab handle 🕮 154

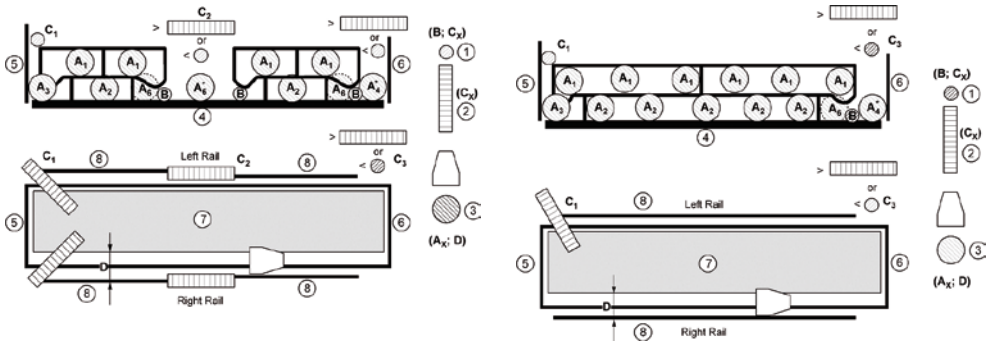
Further accessories 🕮 154


| | | | | | |
|---|---|---|---|---|---|
| Project, address, customer no.: | | | | | |
| Type of bed, product, location of the bed: | | | | | |
| Bed Identification (e.g. facilities own identification or Völker ID-no.): | | | | | |
| Date of check: | | Name of technician: | | | |
| **Kind of check** | **Component to be checked** | **Anually** | **Accepted** | **Not accepted** | **Not applicable** |
| Visual inspection | Inscription on device readable | | | | |
| | Instructions for use available | | | | |
| | Base frame | B* | | | |
| | Lying surface, wing and spring elements (if existing) | B* | | | |
| | Trapeze bar adapter, infusion bar adapter | B* | | | |
| | Power supply cable, plug or charger, charging connection | B* | | | |
| | Strian relieve, bend protection, cable hook | B*/S* | | | |
| | Connecting cable, plug-in contacts, blind plugs | B*/S* | | | |
| | Positioning (spacing 1 mm) and sensor cabling (only Vis-a-Vis-bed) | B*/S* | | | |
| | Housing (motor, control electronics) | B* | | | |
| | Hand control (housing, cable) | B* | | | |

# Technical control 1/3

## 1. Visual inspection

Check the frame parts for plastic deformations and/or wear. Amongst other things, these include: the lower frame, the lifting mechanism, all parts of the lying surface (back, seat, upper leg and lower leg sections, wings and spring elements (if fitted)), trapeze bar, trapeze bar holder and steering castors.




## 2. Functional check of the side rails

The side rails must be checked in accordance with DIN EN 60601-2-52.

Check that the locking mechanism for the side rails is working correctly and that there are no visible deformations or signs of wear on the side rails.

Check that the prescribed distances are maintained, even when the side rails are placed under load. All measurements of the side rail distances should be made in the flat lying surface position, since the dimensions given while the bed is otherwise positioned do not show less favorable conditions.

| Letter | Description | Dimension |
|---|---|---|
| $A_x$ | The distance between elements within the scope of the SIDE RAIL in its raised/engaged position or of the area formed by the SIDE RAILS and the fixed parts of the BED or ACCESSORIES. | < 120 mm |
| B | not applicable | - |
| $C_1$ | Distance between HEAD BOARD and SIDE RAIL | < 60 mm |
| $C_{2,3}$ | Distance between divided SIDE RAIL and distance between SIDE RAIL and FOOT BOARD | < 60 mm or > 318 mm |
| D | Area between SIDE RAIL and MATTRESS | 120 mm cone may sink max. 60 mm under the mattress surface without pressure |
| G | Height of the upper edges of the SIDE RAILS above the mattress without compression over at least 1/2 of the length of the LYING SURFACE | ≥ 220 mm |

The measurement of A and D must be performed using a cone as defined in DIN EN 60601-2-52. The force used for measurement A must be at least 250 N.

### 3. Functional check of the brakes

Check that the brake is functioning correctly (safety, braked, free running).

### 4. Functional check of the drives

Travel through the full adjustment range of each motor. Look out for any unusual noises, watching the speed, ease of running etc., and check that the selected function travels in the correct direction. In particular, ensure that the motor switches off automatically when it reaches its terminal position*.

* Please note that the terminal position can vary from bed model to bed model. Please consult the technical specifications for this or, if in doubt, contact our service department.

### 5. Mains connection cable

Check

- the mains connection cable, including cable guides
- the strain relief, including kink protection sleeve
- the mains connection plug
- the cable hooks

for damage.

### 6. Cabling

Check the cable guide and that the plug contacts are correctly seated and do not exhibit any damage.

Check the cables for damage.

### 7. Housing

Check all housings for damage.
All screws must be firmly tightened and seals must not exhibit any visible damage.

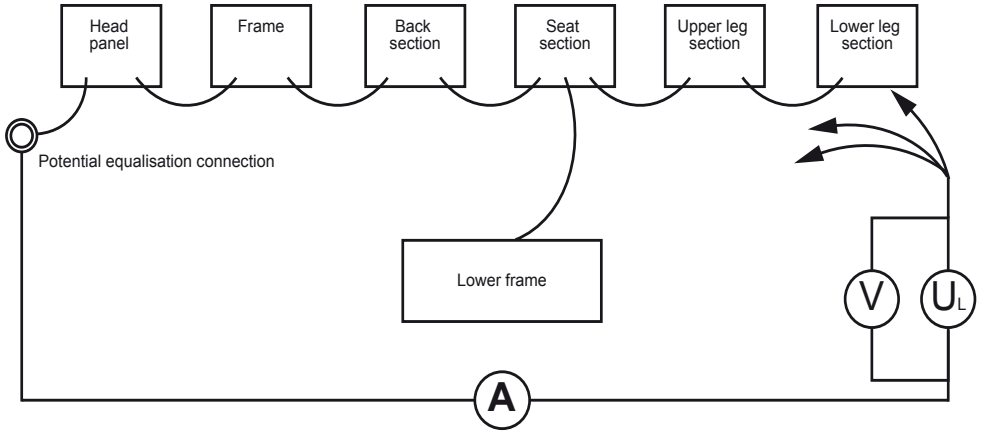
### 8. Mechanical check

Check the function of the Rastomat by manually moving the lower leg section to the individual positions.

### 9. Measurement as per DIN EN 62353

The bed must be checked electrically in accordance with DIN EN 62353. The leakage current should be measured by means of alternative measurement. The max. measured value must be less than or equal to 100 µA. Please note that, if available, the green mains isolation button (optional) on the dual drive 🕮 29 must be pressed throughout the whole measurement.

On beds with a potential equalization connection (see diagram below), the impedance of the potential equalization within the bed must also be measured. The impedance must be less than 0.1 Ω (I=5…25 A, R=U/I < 0.1 Ω).




### 10. Trapeze bar grab handle

Check whether the plastic and holding frame of the trapeze bar grab handle exhibit any damage and that the fixing rods on the trapeze bar are intact.

The handle of the trapeze bar and fastening strap must be replaced in the following cycles:

- every 5 years: Trapeze bar grab handle and trapeze bar grab handle with roll function in elderly care service
- every 3 years: Trapeze bar grab handle with roll function in hospital service.

### 11. Further accessories

Further accessories must always be checked in accordance with the manufacturer's instructions.

# Troubleshooting

The chapter entitled **Troubleshooting** contains a table, together with information on the fault localization.

## CONTENTS

Table of faults 📖 156

# Troubleshooting | Table of faults 1/4

The following table contains information on potential functional faults. The causes of such faults can be improper use or wear. These functional faults can cause injury to patients and staff.

Anyone responsible for carrying out maintenance and servicing must at least have read the safety notes for the respective bed model and be qualified in accordance with MPBetreibV § 4.
The requirements for personnel defined by the Medical Device Operator Ordinance must be ensured by the bed operator.

To ensure that the beds work properly, the instructions for use and the bed service manual must always be accessible to the service personnel.

***NOTE*** Before carrying out any troubleshooting, check that the bed is connected to the power supply (the mains plug is in a live socket). Then turn the nurse keypad on and ensure that the battery pack is charged (observe the LED of the battery display on the nurse keypad).

If the same fault occurs repeatedly, read out the error memory from the optional Völker Diagnostic System (VDS) before resetting it.

⚠ **WARNING** Before carrying out repair work, always disconnect the mains plug **and** disconnect the bed from the battery pack by pressing the buttons "back section down", "upper leg section down" and "lying surface down" on the hand control or the nurse hand control or the buttons "back section down", "upper leg section down" and "ON" on the nurse keypad at the same time!

**The Völker Diagnostic System**

Targeted use of the Völker Diagnostic System for continuous maintenance, servicing and monitoring of Völker hopital and nursing home beds secures availability, reduces bound capital, guarantees a documentation and history in line with requirements and permanently available and thus safeguards the investment material and its value retention.

You can obtain further information on the Völker Diagnostic System (art. no.: VDS) and the corresponding training from your contact at Völker.

| Fault | Possible cause | Troubleshooting |
|---|---|---|
| Adjustment of the back or upper leg section is not working. | (1) Hand control locked.<br>(2) Nurse hand control / keypad locked.<br>(3) The mains plug is not plugged in or there is no power to the socket and battery pack is discharged.<br>(4) Bed taken out of service.<br>(5) Failure or communication error in the electronics.<br>(6) Hand control faulty.<br>(7) Nurse hand control / keypad faulty. | (1) Unlock hand control.<br>(2) Unlock nurse hand control / keypad.<br>(3) Connect the plug or check the socket. Then press green mains isolation button (optional) 🕮 29 on the dual drive if present.<br>(4) If present, press the green mains isolation button (optional) 🕮 29 on the dual drive.<br>(5) Press the reset button 🕮 16 on the dual drive, and then press any hand control function.<br>(6) Replace hand control.<br>(7) Replace nurse hand control / keypad. |
| Adjustment of the back section is not working. | (1) CPR lever jammed. | (1) Check whether the CPR lever is jammed and correct if necessary. |

☞ *Continued on next page.*

| Fault | Possible cause | Troubleshooting |
|---|---|---|
| Adjustment of the lower leg section is not working. | (1) Lower leg section must be adjusted manually. | (1) Adjust lower leg section manually. |
| | (2) Rastomat defective. | (2) Replace Rastomat. |
| The bed cannot be adjusted in height. | (1) Hand control locked. | (1) Unlock hand control. |
| | (2) Nurse hand control / keypad locked. | (2) Unlock nurse hand control / keypad. |
| | (3) The mains plug is not plugged in or there is no power to the socket and battery pack is discharged. | (3) Connect the plug or check the socket. Then press green mains isolation button (optional) 🕮 29 on the dual drive if present. |
| | (4) Bed taken out of service. | (4) If present, press the green mains isolation button (optional) 🕮 29 on the dual drive. |
| | (5) Failure or communication error in the electronics. | (5) Press the reset button 🕮 16 on the dual drive, and then press any hand control function. |
| | (6) Hand control faulty. | (6) Replace hand control. |
| | (7) Nurse hand control / keypad faulty. | (7) Replace nurse hand control / keypad. |

| Fault | Possible cause | Troubleshooting |
|---|---|---|
| Height adjustment upwards occurs in pendulum mode (two-way height adjustment).<br><br>***NOTE*** The bed has a pendulum mode as a protective function which serves to improve the quality in terms of availability. Please only contact our service department if the pendulum swings constantly. | (1) Height of lying surface has not been adjusted for a long time.<br><br>(2) Bed has been overloaded.<br><br>(3) If the bed moves in pendulum mode during load-free or normal operation, this can indicate mechanical problems. | (1) Adjust height of lying surface several times.<br><br>(2) Ensure safe working load. Where necessary, put less weight on the bed.<br><br>(3) The bed must be analyzed precisely with the VDS (Völker Diagnostic System) (if necessary contact the Völker Service). |

# Appendix

The **Appendix** section contains technical information, manufacturer's declarations and forms.



Konformitätserklärung
Anhang VII
EU-Richtlinie 93/42/EWG

Der Unterzeichnende
Völker GmbH
Wullener Feld 79
58454 Witten

mit einer Fertigungsstätte unter der Adresse:
Völker GmbH
Ahornstraße 4
09661 Hainichen

bestätigt, dass die nachfolgend bezeichneten Produkte in der von uns in Verkehr gebrachten Ausführung die grundlegenden Anforderungen des Anhangs I der EU-Richtlinie 93/42/EWG erfüllen. Es wurden die folgenden Normen angewendet :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52 :2010

Declaration of conformity
Appendix VII
EU Directive 93/42/EEC

The signatory
Völker GmbH
Wullener Feld 79
58454 Witten/Germany

with a manufacturing side at:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Germany

confirms that the products described below and in the form distributed by ourselves meet the basic requirements of Appendix I of EU Directive 93/42/EEC. The following standards are applied :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010

Déclaration de conformité
Annexe VII
Directive EU 93/42/CEE

La soussignée
Völker GmbH
Wullener Feld 79
58454 Witten/Allemagne

avec un site de production à:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Allemagne

confirme que les produits spécifiés ci-dessous sont conformes, dans le modèle mis en circulation, aux exigences fondamentales de L'annexe L de la directive européenne 93/42/CEE. Les standards suivants sont appliqués :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010

## CONTENTS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Technical data 🕮 163

Classification 🕮 165

Type label 🕮 166

Dimension print S 582 🕮 168

Service life / disposal 🕮 169

Manufacturer's declarations, forms, electronic service manual 🕮 170

# Appendix | Spare part order, tool list, service points

## Spare part order

Use the form Spare Part Order 🕮 180 for ordering.

It is essential to fill out the form fully when ordering.

- The model designation and
- identification number of your bed

are located on the type label 🕮 on the inside of the head panel.

You can find the spare part you are looking for quickly and easily in the exploded views of the individual assemblies in this service manual. The further data required for the order can then be found in the parts list.

- Quantity
- Article number
- Designation of the article.

If you have a bed with different dimensions (see original order documents), it is possible that the replacement parts may also differ from the standard.

## Tool list

- Screw clamp
- Cordless screwdriver
- Screwdriver, small, for bits
- Bit PH1
- Bit TX20
- Slot-head screwdriver, small
- Pliers

## Service points

If necessary, please seek assistance from the relevant contact at your nearest sales organization. You will receive all the information you need for comprehensive service promptly.

# Appendix | Symbols used

**Warning symbols**
Information marked with this symbol must always be read and strictly adhered to!

Warning about the risk of crushing and entrapment!

Observe the information in the instructions for use!

= 250 kg
Safe working load 250 kg

= 185 kg
Max. permitted weight of the patient 185 kg (in application environments 1 and 2)

Direct current

Alternating current

Protection class II device, protection-insulated

Type B application part as per DIN EN 60601-1

CE
The product satisfies the fundamental requirements of Appendix 1 of EU Directive 93/42/EEC.

The product must be disposed of in accordance with EU Directive 2002/96 pertaining to old electrical and electronic equipment.

The following logos are country-specific:

TÜV SÜD certified
(Technical Inspection Association SÜD)

NRTL certified
(Nationally Recognized Testing Laboratory)

# Appendix | Technical data (standard design) 1/2

The details marked below with * are dependent on the length, width or model of the bed. The values specified relate to model S 582 in Design S.

| | |
|---|---|
| External dimensions (W x L)<br><br>for lying surface 90 x 200 cm *<br>for lying surface 90 x 210 cm *<br>for lying surface 100 x 200 cm *<br>for lying surface 100 x 210 cm * | <br><br>approx. 99 x 213 cm<br>approx. 99 x 223 cm<br>approx. 109 x 213 cm<br>approx. 109 x 223 cm |
| Clearance height | approx. 13 cm ** |
| Height of the lower edge of lying surface frame (min./max.) * | approx. 19 cm / 74 cm |
| Height of the upper edge of the lying surface (min./max) * | approx. 25 cm / 80 cm |
| Height of upper edge of head and foot board (min./max.) * | approx. 62 cm / 117 cm |
| Lying surface (4-part) * | approx. 90 x 200/210 cm<br>approx. 100 x 200/210 cm |

| | | |
|---|---|---|
| Volumetric weight of the mattress material | 40 - 50 kg/m$^3$ | |
| Unladen weight * | approx. 161 kg | |
| Safe working load for the bed | 250 kg | |
| Max. patient weight<br><br>S 582 | in application environment 1, 2<br><br>185 kg | in application environment 3, 4, 5<br><br>215 kg |
| Safe working load for the trapeze bar holder | 75 kg | |
| Safe working load for drip stands | 2 kg / hook | |
| Castors | 4 items: Ø 125 mm | |
| Max. load on castors | 150 kg (dynamic) | |

** from a lying surface height of 36 cm at a width of 76 cm.
The width of the clearance increases with a larger lying surface.

# Appendix | Technical data (standard design) 2/2

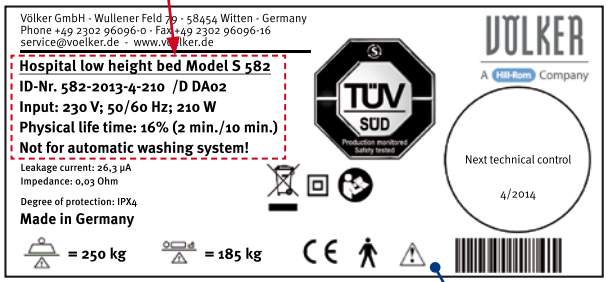
| | |
|---|---|
| Mains voltage<br><br>Power consumption<br>Mains frequency | AC 230 V (EU version)<br>AC 115 V (US version)<br>210 W<br>50 Hz / 60 Hz |
| Primary fuse | 1.6 A (EU version)<br>3.15 A (US version) |
| Battery pack | 2 x 12 V block battery<br>(lead gel) 5.4 Ah |
| Operating temperature range | + 10 °C to + 40 °C |
| Transport / storage temperature range | - 20 °C to + 60 °C |
| Air humidity | 30 % to 75 % rel. |
| Atmosphere range | 700 hPa to 1060 hPa |
| Operating height | maximum 3000 m |

| | |
|---|---|
| Protection against electric shock | Protection class II or device with internal electrical current source |
| Protection type by housing as per EN 60529 | IPX4<br>not suitable for cleaning in automatic washing systems |
| Degree of protection of the applied part against electric shock as per DIN EN 60601-1 | Type B |
| Degree of protection against explosive substances and mixtures | The bed is not protected against explosion and should not be used in an environment in which flammable anesthetics or flammable cleaning agents are present (see brochure from occupational insurance association ZH 1/200) |
| Grouping/Classification as per 93/42/EEC Appendix IX | Class I |

| | |
|---|---|
| Mode | 2 min./10 min.<br>(on-time maximum 2 minutes / off-time 10 minutes)) |
| Technical control | 1x yearly |

# Appendix | Type label 1/2

Type specifications


Völker GmbH - Wullener Feld 79 - 58454 Witten - Germany
Phone +49 2302 96096-0 - Fax +49 2302 96096-16
service@voelker.de - www.voelker.de
Hospital low height bed Model S 582
ID-Nr. 582-2013-4-210 /D DA02
Input: 230 V; 50/60 Hz; 210 W
Physical life time: 16% (2 min./10 min.)
Not for automatic washing system!
Leakage current: 26,3 µA
Impedance: 0,03 Ohm
Degree of protection: IPX4
Made in Germany
= 250 kg
= 185 kg
VÖLKER
A Hill-Rom Company
TÜV SÜD
Next technical control
4/2014

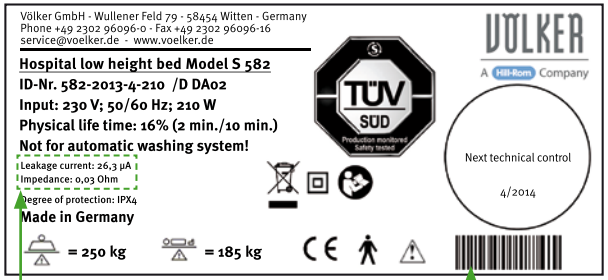
The type label is located at the head end on the inside of the frame.

Raise the back section to read the type label.

| Type specifications | Explanation |
|---|---|
| Line 1 | Model designation. In the example:<br>Hospital low height bed Model S 582 |
| Line 2 | ID No. (made up as follows):<br>582 = Model<br>-2013 = Year of construction<br>-4 = Production week (calendar week)<br>-210 = Consecutive number<br>D = Mains plug version (e.g. D = Germany)<br>DA02 = Drive version |
| Line 3 | Input: mains voltage; mains frequency; power consumption |
| Line 4 | Physical life time: Maximum uninterrupted on-time of electromotive adjustment.<br>In the example: 2 min./10 min.<br>This means that the bed may be operated with the electric motor without interruption for max. 2 minutes, after which a pause of 10 minutes will be necessary (protection against overheating). |
| Line 5 | Suitability for automatic washing system.<br><br>In the example: Not for automatic washing system. |

Symbols used 📖 162

# Appendix | Type label 2/2

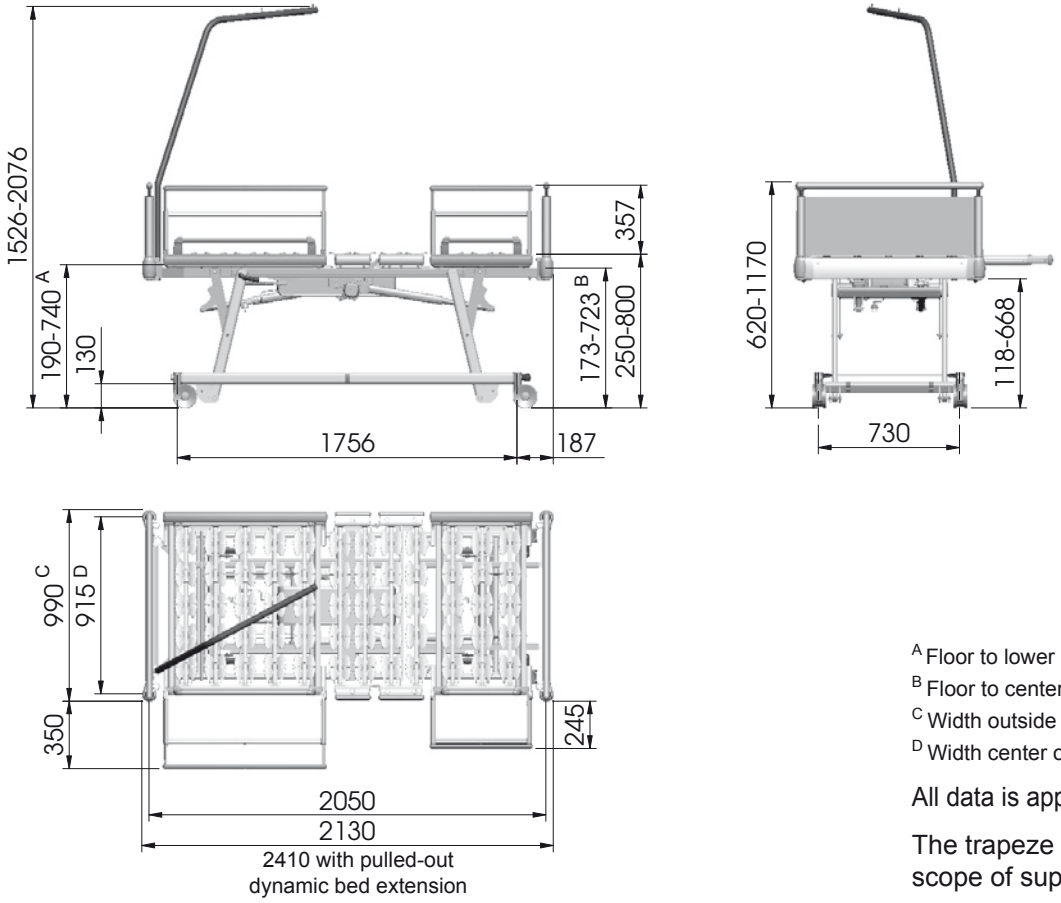

Völker GmbH · Wullener Feld 79 · 58454 Witten · Germany
Phone +49 2302 96096-0 · Fax +49 2302 96096-16
service@voelker.de · www.voelker.de
Hospital low height bed Model S 582
ID-Nr. 582-2013-4-210 /D DA02
Input: 230 V; 50/60 Hz; 210 W
Physical life time: 16% (2 min./10 min.)
Not for automatic washing system!
Leakage current: 26,3 µA
Impedance: 0,03 Ohm
Degree of protection: IPX4
Made in Germany
= 250 kg
= 185 kg
VÖLKER
A Hill-Rom Company
TÜV SÜD
Next technical control
4/2014
Measured values
Barcode

| Measured values | |
|---|---|
| Line 1 | Leakage current in µA |
| Line 2 | Potential equalization impedance in Ω (Ohm) |

The specified initial measured values were measured in accordance with EN 62353.

The barcode (code 39) contains the numeric ID No. (10 digits).

# Appendix | Dimension print S 582 (standard design)




[A] Floor to lower edge of lying surface frame
[B] Floor to center of wall spacing roll
[C] Width outside of wall spacing roll
[D] Width center of wall spacing roll

All data is approximate dimensions in mm.

The trapeze bar is not included in the scope of supply of the bed.

# Appendix | Service life / disposal

The bed's expected service life is approx. 10 years. To ensure environmentally friendly disposal after taking the bed out of service, please contact your responsible area sales manager.

# Appendix | Manufacturer's declarations, forms, electronic service manual

**Manufacturer's declarations**


- Declaration of conformity 🕮 171
- Table 201 – Guidelines and manufacturer's declaration – electromagnetic compatibility (6.8.3.201 a) 3)) 🕮 172
- Guidelines and manufacturer's declaration – electromagnetic compatibility (6.8.3.201 a) 6)) 🕮 173
- Table 204 – Guidelines and manufacturer's declaration – electromagnetic compatibility for all devices and systems that are not life-sustaining (6.8.3.201 b)) 🕮 175
- Table 206 - Recommended protected distance between portable and mobile HF telecommunications equipment and the bed – for devices and systems that are not life-sustaining (6.8.3.201 b)) 🕮 178


**Forms**


- Technical check of Völker hospital and healthcare beds in accordance to German standards and safety regulations incl. measurements required 🕮 179
- Spare part order 🕮 180


**Electronic service manual**


- Prerequisite for use of the electronic service manual 🕮 181

VÖLKER
A Hill-Rom Company

# Konformitätserklärung / Declaration of Conformity / Déclaration de conformité

## Konformitätserklärung
Anhang VII
EU-Richtlinie 93/42/EWG

Der Unterzeichnende
Völker GmbH
Wullener Feld 79
58454 Witten

mit einer Fertigungsstätte unter der Adresse:
Völker GmbH
Ahornstraße 4
09661 Hainichen

bestätigt, dass die nachfolgend bezeichneten Produkte in der von uns in Verkehr gebrachten Ausführung die grundlegenden Anforderungen des Anhangs I der EU-Richtlinie 93/42/EWG erfüllen. Es wurden die folgenden Normen angewendet :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52 :2010

Damit sind die Anforderungen des Medizinproduktegesetzes zur Anbringung einer **CE Kennzeichnung** erfüllt.

Bei einer nicht mit dem Hersteller abgestimmten Änderung des Produktes verliert diese Konformitätserklärung ihre Gültigkeit.

**Bezeichnung der Produkte :**
**Klinikniedrigstbetten Modell S 582.**

EG-Richtlinien :
Richtlinie 93/42/EWG vom 14.06.1993 über Medizinprodukte (Anhang I „Grundlegende Anforderungen").
Die Produkte sind Produkte der Klasse I gemäß Anhang IX der Richtlinie 93/42/EWG vom 05.09.2007.

## Declaration of conformity
Appendix VII
EU Directive 93/42/EEC

The signatory
Völker GmbH
Wullener Feld 79
58454 Witten/Germany

with a manufacturing side at:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Germany

confirms that the products described below and in the form distributed by ourselves meet the basic requirements of Appendix I of EU Directive 93/42/EEC. The following standards are applied :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010

The requirements of the medical products law pertaining to the display of a **CE seal** of approval are thereby fulfilled.

This declaration of conformity becomes invalid if the products are altered without the agreement of the manufacturer.

**Description of products Type/Article No.:**
**Hospital low height beds Model S 582.**

EU Directives :
Directive 93/42/EEC of 14.06.1993 concering medical products (Appendix I, Basic requirements). The design and construction of this product conforms to Class I (Appendix IX) Directive 93/42/EEC of 05.09.2007.

## Déclaration de conformité
Annexe VII
Directive EU 93/42/CEE

La soussignée
Völker GmbH
Wullener Feld 79
58454 Witten/Allemagne

avec un site de production à:
Völker GmbH
Ahornstraße 4
09661 Hainichen/Allemagne

confirme que les produits spécifies ci-dessous sont conformes, dans le modèle mis en circulation, aux exigences fondamentales de L'annexe L de la directive européenne 93/42/CEE.
Les standards suivants sont appliqués :

DIN EN 60601-1:2006/AC:2010
DIN EN 60601-1-2:2007,
DIN EN 60601-1-4:1996+A1:1999,
DIN EN 60601-2-52:2010

Les exigences de la loi sur les produits médicaux concernant leport de la **marque CE** sont ainsi satisfaites.

Cette déclaration de conformité est invaledée en cas de modification des produits, non autorisée par le fabricant.

**Désignation des produits**
**Modèle/Référence :**
**Lits très bas hospitaliers modèle S 582.**

Directives européennes :
Directive 93/42/CEE du 14.06.1993 sur les produits médicaux (annexe I « Exigences fondamentales »). La conception du produit est conforme à la classe I (annexe IX) Directive 93/42/CEE du 05.09.2007.

Witten, 18.01.2013

Mitchel Tidman
*Geschäftsführer / Managing Director / Gérant*

**Table 201 - Guidelines and manufacturer's declaration - Electromagnetic compatibility**

**(6.8.3.201 a) 3))**

The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment.

| Emissions measurements | Conformity | Electromagnetic environment - guideline |
|---|---|---|
| HF emissions<br>IEC 61000-3-2 | Class A | The bed is suitable for use in all institutions, including residential areas and such that are directly connected to a public mains supply network that also supplies buildings intended for residential purposes. |
| Fluctuations in voltage / flicker<br>IEC 61000-3-3 | Conforms | |
| RF emissions<br>CISPR 14 – 1 | Conforms | The bed is not suitable for connection to other equipment. |

| Guidelines and manufacturer's declaration - Electromagnetic compatibility (6.8.3.201 a) 6)) | | | |
|---|---|---|---|
| The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment. | | | |
| **Compatibility check** | **IEC 60601 Testing level** | **Conformity level** | **Electromagnetic environment - guideline** |
| Discharge of static electricity (ESD)<br>IEC 61000-4-2 | ± 6 kV contact discharge<br>± 8 kV air discharge | ± 6 kV contact discharge<br>± 8 kV air discharge | The ground should be made of wood or concrete and be laid with ceramic tiles. If the ground is covered with synthetic material, the relative air humidity must be at least 30%. |
| Rapid transient electrical disturbance / bursts<br>IEC 61000-4-4 | ± 2 kV for voltage supply<br>± 1 kV for input and output cables | ± 2 kV for voltage supply<br>Not applicable | The quality of the voltage supply should be commensurate with a typical commercial or hospital environment. |
| Surge voltages<br>IEC 61000-4-5 | ± 1 kV series mode voltage<br>± 2 kV common-mode voltage | ± 1 kV series mode voltage<br>Not applicable | The quality of the voltage supply should be commensurate with a typical commercial or hospital environment. |

☞ *Continued on next page.*

| Compatibility check | IEC 60601 Testing level | Conformity level | Electromagnetic environment - guideline |
|---|---|---|---|
| Voltage drops, short interruptions and voltage fluctuations in the mains voltage supply<br>IEC 61000-4-11 | < 5 % $U_T$<br>(>95 % voltage peaks in $U_T$ )<br>for 0.5 cycles<br><br>40 % $U_T$<br>(60 % dip in $U_T$ )<br>for 5 cycles<br><br>70 % $U_T$<br>(30 % dip in $U_T$ )<br>for 25 cycles<br><br>< 5 % $U_T$<br>(>95 % dip in $U_T$ )<br>for 5 sec | < 5 % $U_T$<br>(>95 % voltage peaks in $U_T$ )<br>for 0.5 cycles<br><br>40 % $U_T$<br>(60 % dip in $U_T$ )<br>for 5 cycles<br><br>70 % $U_T$<br>(30 % dip in UT )<br>for 25 cycles<br><br>< 5 % $U_T$<br>(>95 % dip in $U_T$ )<br>for 5 sec | The quality of the voltage supply should be commensurate with a typical commercial or hospital environment.<br><br>If the user requires continued function from the bed when interruptions in the power supply occur, it is recommended that the bed be powered via an uninterruptible power supply or a battery. |
| Magnetic field at supply frequency<br>(50/60 Hz)<br>IEC 61000-4-8 | 3 A/m | 3 A/m | Magnetic fields at mains frequency should correspond to the typical values present in commercial and hospital environments. |
| Remark 1: $U_T$ is the mains AC voltage before the testing level is applied. | | | |

| Table 204 – Guidelines and manufacturer's declaration – Electromagnetic compatibility for all devices and systems that are not life-sustaining (6.8.3.201 b)) | | | |
|---|---|---|---|
| The bed is intended for use in the electromagnetic environment as described below. The customer or user of the bed should ensure that it is used in such an environment. | | | |
| **Compatibility check** | **IEC 60601 Testing level** | **Conformity level** | **Electromagnetic environment - guideline** |
| Conducted HF disturbances<br><br>IEC 61000-4-6 | 3 Vrms<br>150 kHz to 80 MHz | 3 V | |

☞ *Continued on next page.*

| Compatibility check | IEC 60601 Testing level | Conformity level | Electromagnetic environment - guideline |
|---|---|---|---|
| Radiated HF disturbances<br><br>IEC 61000-4-3 | 3 V/m<br>80 MHz to 2.5 GHz | 3 V/m | Portable and mobile radio equipment should not be used any closer to the bed, or their cables, than the recommended protective distance which is calculated based on the equation applicable for the transmission frequency.<br>**Recommended protective distance**<br>$d = 1.17\sqrt{P}$ 150 kHz to 80 MHz<br>$d = 1.17\sqrt{P}$ 80 MHz to 800 MHz<br>$d = 2.33\sqrt{P}$ 800 MHz to 2.5 GHz<br>Where *P* is the rated output of the transmitter in Watts (W) as specified by the transmitter manufacturer and *d* is the recommended protective distance in metres (m).<br>The field strength of stationary radio transmitters should be less than the conformity level[b] at all frequencies, as verified by an on-site test[a].<br>Disturbance is possible in the environment of equipment that bears the following label.<br> |

☞ *Continued on next page.*

| |
|---|
| Remark 1: At 80 MHz and 800 MHz, the higher frequency range applies.<br><br>Remark 2: These guidelines may not be applicable in all cases. The spread of electromagnetic parameters is influenced by the absorption and reflection of buildings, objects and people. |
| [a] The field strength of stationary transmitters, such as base stations of cordless telephones and mobile land radio, amateur radio stations, AM and FM radio and TV stations cannot be quantified in theory in advance accurately. To determine the electromagnetic environment in relation to a stationary transmitter, a study of the site should be considered. If the measured field strength at the site where the bed is used exceeds the conformity levels stated above, the bed should be observed to ensure that it functions correctly. If unusual features are observed, additional measures may be required, such as modified alignment or a different location for the bed.<br><br>[b] In the frequency range from 150 kHz to 80 MHz, the field strength should be less than 3 V/m. |

**Table 206 - Recommended protective distance between portable and mobile HF telecommunications equipment and the bed – for devices and systems that are not life-sustaining (6.8.3.201 b))**

The bed is intended for operation in an electromagnetic environment in which HF disturbances are controlled. The customer or user of the bed can help to avoid electromagnetic disturbances by respecting the minimum distance between portable and mobile HF telecommunications equipment (transmitters) and the bed. The recommended minimum distance d is dependent on the maximum power output of the communication device (see below).

| Rate output of the transmitter W | Protective distance according to the frequency of the transmitter m | | |
|---|---|---|---|
| | 150 kHz to 80 MHz $d = 1.17\sqrt{P}$ | 80 MHz to 800 MHz $d = 1.17\sqrt{P}$ | 800 MHz to 2.5 GHz $d = 2.33\sqrt{P}$ |
| 0.01 | 0.12 | 0.12 | 0.23 |
| 0.1 | 0.37 | 0.37 | 0.74 |
| 1 | 1.17 | 1.17 | 2.33 |
| 10 | 3.69 | 3.69 | 7.38 |
| 100 | 11.67 | 11.67 | 23.33 |

For transmitters whose maximum rated output is not specified in the table above, the recommended protective distance *d* in metres (m) can be calculated using the equation in the column that features *P* as the maximum power output of the transmitter in Watts (W) as defined by the transmitter manufacturer.

Remark 1: At 80 MHz and 800 MHz, the higher frequency range applies.

Remark 2: These guidelines may not be applicable in all cases. The spread of electromagnetic parameters is influenced by the absorption and reflection of buildings, objects and people.

# Technical check of Völker hospital and healthcare beds in accordance to German standards and safety regulations incl. measurements required

| | | | | | |
|---|---|---|---|---|---|
| Project, address, customer no.: | | | | | |
| Type of bed, product, location of the bed: | | | | | |
| Bed Identification (e.g. facilities own identification or Völker ID-no.): | | | | | |
| Date of check: | | Name of technician: | | | |

| Kind of check | Component to be checked | Anually | Accepted | Not accepted | Not applicable |
|---|---|---|---|---|---|
| Visual inspection | Inscription on device readable | | | | |
| | Instructions for use available | | | | |
| | Base frame | B* | | | |
| | Lying surface, wing and spring elements (if existing) | B* | | | |
| | Trapeze bar adapter, infusion bar adapter | B* | | | |
| | Power supply cable, plug or charger, charging connection | B* | | | |
| | Strian relieve, bend protection, cable hook | B*/S* | | | |
| | Connecting cable, plug-in contacts, blind plugs | B*/S* | | | |
| | Positioning (spacing 1 mm) and sensor cabling (only Vis-a-Vis-bed) | B*/S* | | | |
| | Housing (motor, control electronics) | B* | | | |
| | Hand control (housing, cable) | B* | | | |
| | Nurse keypad, nurse hand control (housing, cable) | B* | | | |
| | Trapeze bar, assist rail spacer (side rail centre), additional accessories | B*/F* | | | |
| | Transverse motors and cover, head and foot ends | B* | | | |
| | Castors | B* | | | |
| | Wall buffer wheel (if existing) | B* | | | |
| | Side rails including telescopic section, if applicable | B* | | | |
| | HiLow-elevation: check screw locking (only for 5380) | S* | | | |
| Functional inspection of side rails including telescopic section, if applicable | Locking devices | X* | | | |
| | Deformation | X* | | | |
| | Abrasions | X* | | | |
| Functional inspection of drives with hand control and nurse keypad/nurse hand control | Back section, upper leg section, lower leg section, height adjustment, Trendelenburg position, reverse Trendelenburg position, length adjustment (only for Vis-a-Vis-bed) - approach all end positions | X*/M* | | | |
| | Angle limitation (back section to upper leg section >90°) | X* | | | |
| | Adjustment lower leg section (rastomat/hydrolift/support plate) | X* | | | |
| | CPR function (if existing) | X* | | | |
| | Brake (electrical or mechanical) - brake applied<br>- free running<br>(only for hospital beds and - steering position<br>S 280/S 310/S 380/S 282/S 382 (Vis-a-Vis)) | X* | | | |
| | Mechanical release (only for electrical brakes of hospital beds) | X* | | | |
| Functional inspection replacement | 9 V battery (only for beds with Oki-/Ilcomat except S 960-1W/S 961) Replaced (yes/no) | A2* | | | |
| | Trapeze bar handle and belt (if existing) Replaced (yes/no) | A* | | | |
| Functional inspection miscellaneous | Bed extension (if existing) | B* | | | |
| | Bedding storage/bedding drawer (if existing) | B* | | | |
| Comment | | | | | |

| Legally relevant for Germany only (in accordance to DIN EN 62353) | | | | | | |
|---|---|---|---|---|---|---|
| | Leakage current by means of alternative measurement for: beds from year of construction 01.06.2012 ≤ 100 µA beds before year of construction 01.06.2012 ≤ 500 µA | | µA | | | |
| | Potential equalization impedance (if existing) for: beds from year of construction 01.06.2012 < 0.1 Ohm beds before year of construction 01.06.2012 < 0.2 Ohm | | Ω | | | |
| | Measuring instrument S/N | | | | | |
| **Total result of the inspection:** | | | | | | |
| Signature of technician: | | | Next regular inspection: | | | |

***A*:** *To be replaced every 5 years for handles (H) and for H with roll function (RF) in nursing home mode, every 3 years for H with RF in hospital mode, every 2 years for H with RF for cleaning in automatic bed washing systems* · ***A2*:** *To be replaced every two years* · ***B*:** *Check for damage* · ***F*:** *Check for deformation* · ***M*:** *Check function of motors and end switches, does the motor switch off when reaching the end position?* · ***S*:** *Check for correct fit* · ***X*:** *General function control*

**Info**
You can find a printable version of this document on the Internet at www.voelker.de.

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VÖLKER
A Hill-Rom Company

0001h-EN-20130416

# Spare part order



**Völker GmbH**
**Service**
**Wullener Feld 79**
**58454 Witten/Germany**

Tel.: +49 2302 96096-62
Fax: +49 2302 96096-66
E-Mail: service@voelker.de

**Address:** _____

_____

**Name of the ordering party:** _____

**Street address:** _____

**Zip code/city/country:** _____

**Telephone number:** _____

**Customer number:** _____

**Customer order number:** _____

**Purchase order date:** _____

**Signature:** _____
(Please, to fill in the form use block letters)

**Stamp**

☐ **Shipping address, if different from the billing address**

☐ **Billing address, if different from the shipping address**

**Address:** _____

_____

**Attention of:** _____

**Street address:** _____

**Zip code/city/country:** _____

Please fill out all the information carefully and complete the form in its entirety, otherwise we may have problems in delivering and processing this order.

| MODEL (Bed-type) | SERIAL NO. (Identifaction label inside of the bed-head) | SPARE PART DESCRIPTION | ITEM NUMBER | QUANTITY |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
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| | | | | |

**Info**
You can find a printable version of this document on the Internet at www.voelker.de.

**Requirement for using the electronic service manual**

In order to open the electronic version of these operating instructions (PDF file), you must have Adobe Reader 5.0 or later (or the corresponding Adobe Acrobat version or another program for viewing PDF files) installed on your computer.

Adobe Reader is available for nearly all operating systems. The newest version can be obtained free of charge by download from *http://get.adobe.com/uk/reader/* 🕮.

The electronic version of these service manual may be found on the Internet at www.voelker.de.

**Trademarks**

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## Notes

VÖLKER

A Hill-Rom Company

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